

**EXHIBIT 2**

NISSAN

ALTIMA  
VEHICLE  
SECURITY  
SYSTEM  
OPERATOR'S  
MANUAL

CALSONIC

ALTIMA

N2354

# Wireless Remote Entry EEPROM Programming

## Set-up

Key out of ignition and  
drivers door open and unlocked and  
passengers door closed and locked

## Procedure

1. Insert key in ignition and remove.
2. ~~Press the drivers manual door lock switch, LOCK to UNLOCK, 5 times.~~ ~~5 times~~
3. Close and open the drivers door.
4. Press the drivers manual door lock switch, LOCK to UNLOCK, 5 times. ~~5 times~~
5. Insert key in ignition and turn ignition ON and OFF...  
once to add a new code.  
twice to rewrite over all previously stored codes.  
three times to confirm how many codes are stored in the ECU.
6. Remove the key from the ignition.

The car will now respond back the selected mode by automatically locking and unlocking the doors...

once to add a new code.  
twice to rewrite over all previously stored codes.  
one to four times (slowly) to show how many codes have been stored.

If the confirm mode was selected the process is complete.

7. Press the transmitter switch on the key for 1 second.

After the signal is received the car will respond by automatically locking and unlocking the doors once.

NOTE: If the signal was not received, the car will not respond, begin again from step 1.

8. Close and open the drivers door.
9. Press the transmitter key switch for 1 second.

The car will now respond by automatically locking and unlocking the doors...

~~once to confirm the operation is complete.~~  
twice to confirm that...

- a. the signal received does not match the stored code.
- b. the signal received has already been stored.

**THE PROCESS IS NOW COMPLETE.**

6. Connect the harness connectors to the new SLCM in the same order as they were on the original module.
7. Insert the SLCM mounting studs through the holes in the support bracket and install nuts.
8. Reconnect battery and install trunk trim.

#### PROGRAMMING THE HAND TRANSMITTER

Use the PDU to reprogram the security system RF handset transmitters. The following method can be used to manually reprogram handset transmitters:

**NOTE:** All RF handset transmitters belonging to the vehicle being serviced must be available. If the learning process is carried out without having all the transmitters present, all previous transmitter codes will be overwritten, rendering the missing transmitters inoperable.

1. Open the trunk lid and driver's door.
2. Turn the ignition switch to the ON or II position.
3. Rock the valet switch located in the center console storage compartment (Illustration 2) 5 times. A single confirmation chirp and flash of the headlamps indicate that the security system has entered the learning mode.

**NOTE:** If difficulty is experienced entering the learning mode, check that the valet switch is functioning properly.

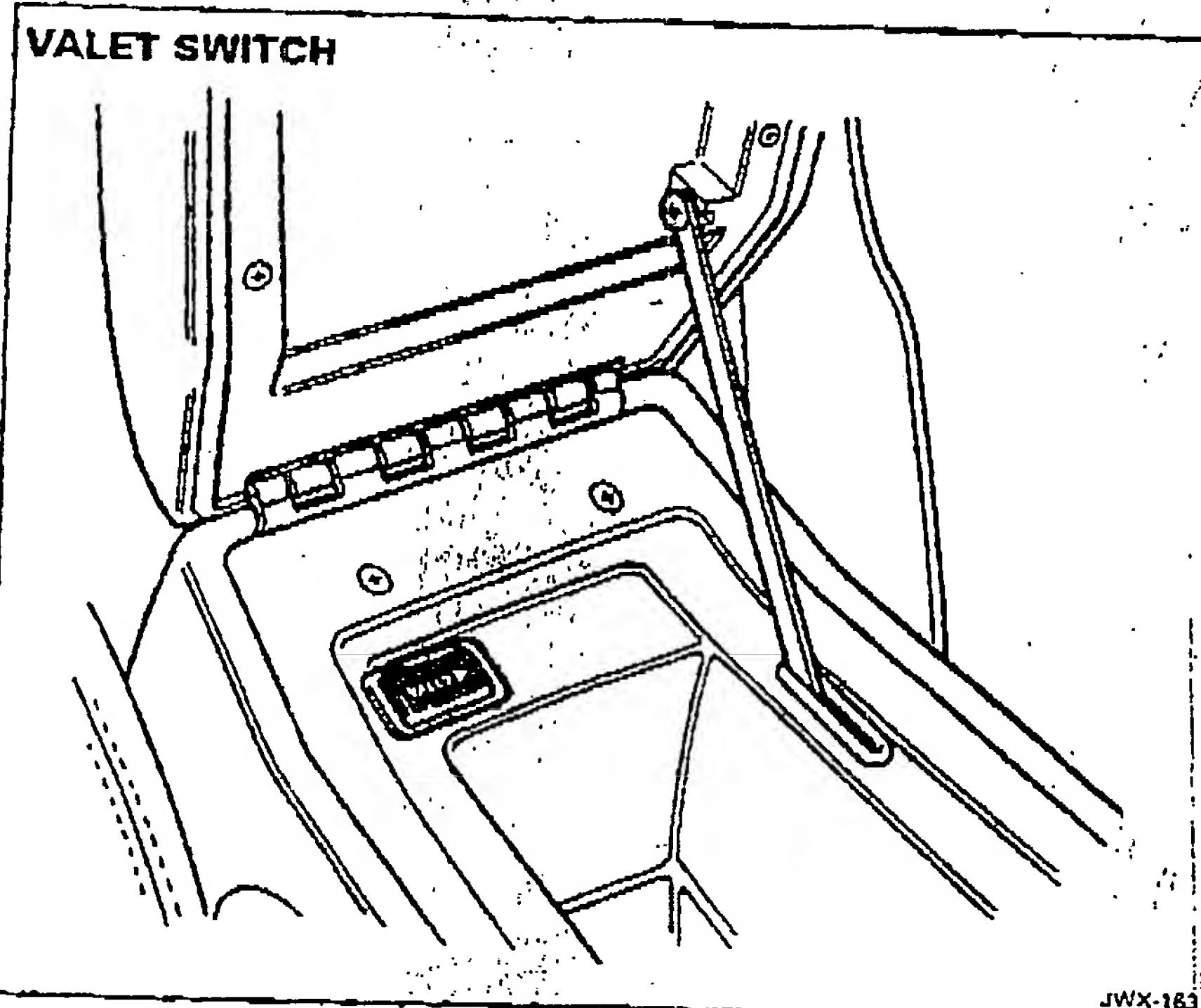


ILLUSTRATION 2

4. Press the arm/lock (larger) button of the first transmitter. This transmitter will be linked to position 1 of the seat/column/mirror memory. A tone will confirm that the transmitter code was accepted. If no transmitter buttons are pushed, the SLCM will also time out after 15 seconds of inactivity, indicated by two chirps.
5. Rock the valet switch once. Two short chirps will signal that the system is prepared to accept the second transmitter.
6. Press the arm/lock button of the second transmitter. This transmitter will be linked to the position 2 of the seat/column/mirror memory. A tone will confirm that the transmitter code was accepted.
7. Rock the valet switch once. Three short chirps will signal that the system is prepared to accept the third transmitter.
8. Press the arm/lock button of the third transmitter. A tone will confirm that the transmitter code was accepted. This transmitter and any others will not be linked to a position in the seat/column/mirror memory.
9. The process of pressing the valet switch and waiting for the number of chirps equivalent to the transmitter number can be repeated for a fourth and fifth transmitter. The valet switch can be pressed to cycle through the unneeded transmitter programming sequences. The SLCM will also time out after 15 seconds of inactivity, indicated by two chirps. This will save the transmitter codes entered up to this point.
10. Turn the ignition switch off, remove the key, and close the doors and trunk lid.
11. Check for proper system operation including the recall of seat, steering wheel and mirror memory positions 1 and 2 from the handset transmitter.

## **WARRANTY INFORMATION:**

### **Service Action S635**

<b>VEHICLE</b>	<b>SUMMARY</b>	<b>DESCRIPTION</b>	<b>TIME</b>
	<b>CODE</b>		<b>ALLOWANCE</b>
Sedan Range 1995 MY VIN 727000 - 739235 Model codes 2310, 2311, 2313, 2314, 2512	HA	Check, replace and reprogram new transmitters when performed at PDI or in conjunction with another repair (no drive in/out time)	0.15 hrs.
Sedan Range 1995 MY VIN 727000 - 739235 Model codes 2310, 2311, 2313, 2314, 2512	HB	Check, replace and reprogram new transmitters - only repair performed - with drive in/out time	0.30 hrs.

# SECTION 01-14B Door Lock Control System, Electronic

SUBJECT	PAGE	SUBJECT	PAGE
VEHICLE APPLICATION .....	01-14B-1	DIAGNOSIS AND TESTING (Cont'd.)	
DESCRIPTION AND OPERATION		Pinpoint Tests .....	01-14B-7
Battery Saver .....	01-14B-2	Symptom Chart .....	01-14B-7
Inputs and Outputs .....	01-14B-2	REMOVAL AND INSTALLATION	
System Wiring .....	01-14B-2	Antenna .....	01-14B-18
Transmitter .....	01-14B-1	Remote Entry Receiver Module .....	01-14B-18
Transmitter Programming .....	01-14B-2	Transmitter Battery .....	01-14B-19
DIAGNOSIS AND TESTING		SPECIAL SERVICE TOOLS/EQUIPMENT .....	01-14B-19
Electrical Schematics .....	01-14B-3	PARTS CROSS-REFERENCE .....	01-14B-19
Inspection and Verification .....	01-14B-6		

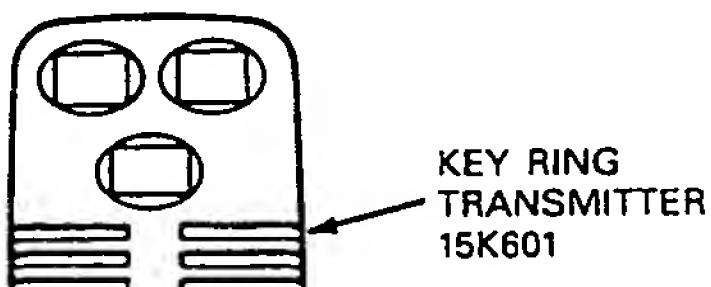
## VEHICLE APPLICATION

Explorer Limited

## DESCRIPTION AND OPERATION

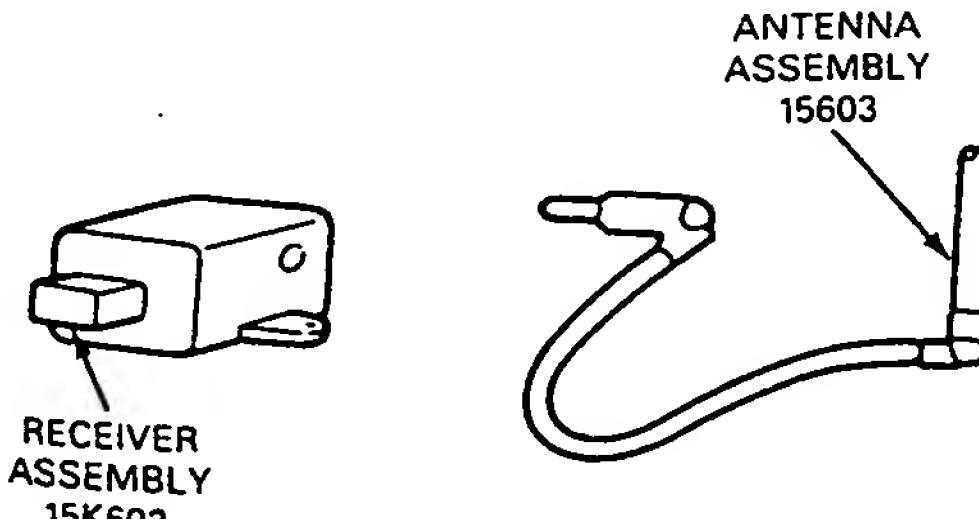
### Transmitter

The remote entry system has three main components: The remote entry receiver module, located behind the quarter trim panel (31012), the antenna and the three button (hand-held) transmitter. The transmitter is re-programmable. All transmitters for the vehicle should be set at the same time. One transmitter is essential for troubleshooting the system.



The remote entry receiver module performs the following functions:

- Unlocks driver's front door (20124).
- Unlocks all front door, front rear door (24630) and liftgate (40010), if equipped.
- Unlocks luggage compartment.
- Locks all front doors, rear doors and liftgate, if equipped.
- Arms and disarms the anti-theft system, if equipped.
- Turns on interior lamps (13776) and keyhole illumination when using the transmitter.
- Activates and deactivates security feature which sounds horn (13832) and flashes parking lamps (13201).
- Activates battery saver feature which removes power from interior lamps 45 minutes after last input to remote entry receiver module.



N10843-A

## DESCRIPTION AND OPERATION (Continued)

## Inputs and Outputs

The remote entry system receives inputs from the following:

- Ignition switch (11572)
- Door lock switch (14028)
- Courtesy lamp switch (13713)
- Door open warning lamp switch (14018)
- Program connector
- Transmitter(s)

The system distributes output to the following:

- Interior lamps
- Power door lock actuator (218A42)
- Keyhole illumination
- Horn relay and bracket (13853)
- Auto lamp relay (parking lamps)
- Anti-theft module (if equipped)

## System Wiring

Typical system wiring is shown in the following illustration. Refer to Section 18-01 for individual wiring harness installations.

## Battery Saver

The remote entry receiver module includes a battery saver relay which supplies power to the interior lamps Circuit 705 and Circuit 53 when active. When the battery saver relay deactivates, power is removed from these interior lamps.

The battery saver relay is activated anytime the remote entry receiver module receives an input signal. This relay deactivates 45 minutes after the last input to the remote entry receiver module.

NOTE: The battery saver relay does NOT control power to the headlamp bulbs (13007).

## Transmitter Programming

NOTE: The remote entry features will not function when the ignition switch is in the RUN or ACCESSORY position.

To unlock the driver's door, press the UNLOCK button on the transmitter (which is programmed into the remote entry receiver module) once. This will also disarm the anti-theft system, if equipped.

To unlock all doors and liftgate, press the UNLOCK button on the transmitter twice, the second depression must be within five seconds of the first UNLOCK depression.

If more than five seconds have elapsed since the first depression of the UNLOCK button, pressing the UNLOCK button again will only unlock the driver's door.

To turn on interior lamps and keyhole illumination, press either UNLOCK or PANIC.

To lock all doors, press LOCK button on the transmitter once. This will also arm the anti-theft system, if equipped.

To confirm that doors have locked, press LOCK button again, within five seconds of the first depression. This will beep the horn and lock all doors again.

To activate the personal security alarm, press the red PANIC button. The horn will beep and parking lamps will flash for a maximum of three minutes.

To deactivate the personal security alarm, press the red PANIC button again or turn the ignition switch ON.

NOTE: The remote entry receiver module erases all previous transmitters from memory when the transmitters are programmed or re-programmed. The remote entry receiver module can store up to four transmitters in memory.

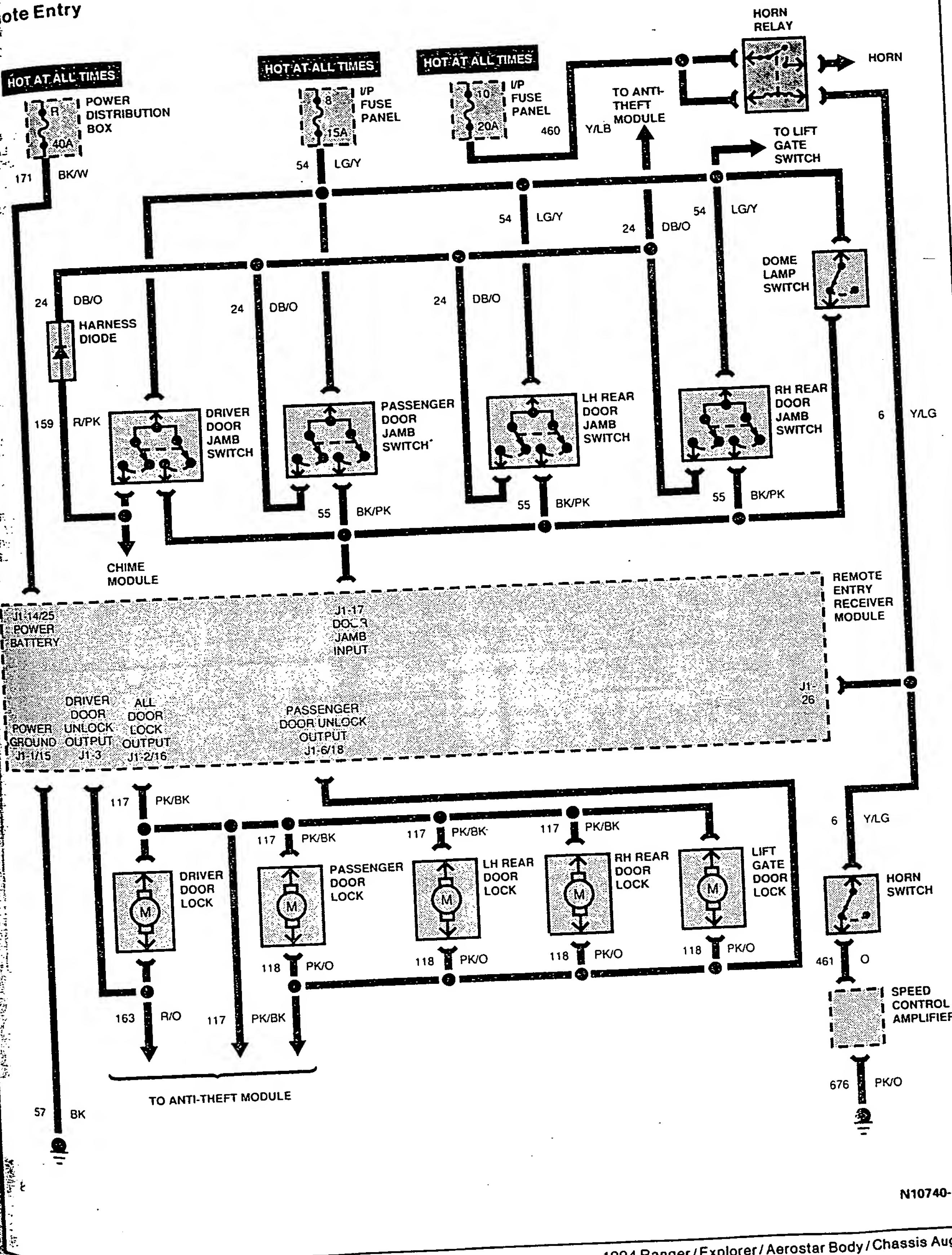
To program (or re-program) transmitter(s) into the remote entry receiver module, perform the following steps:

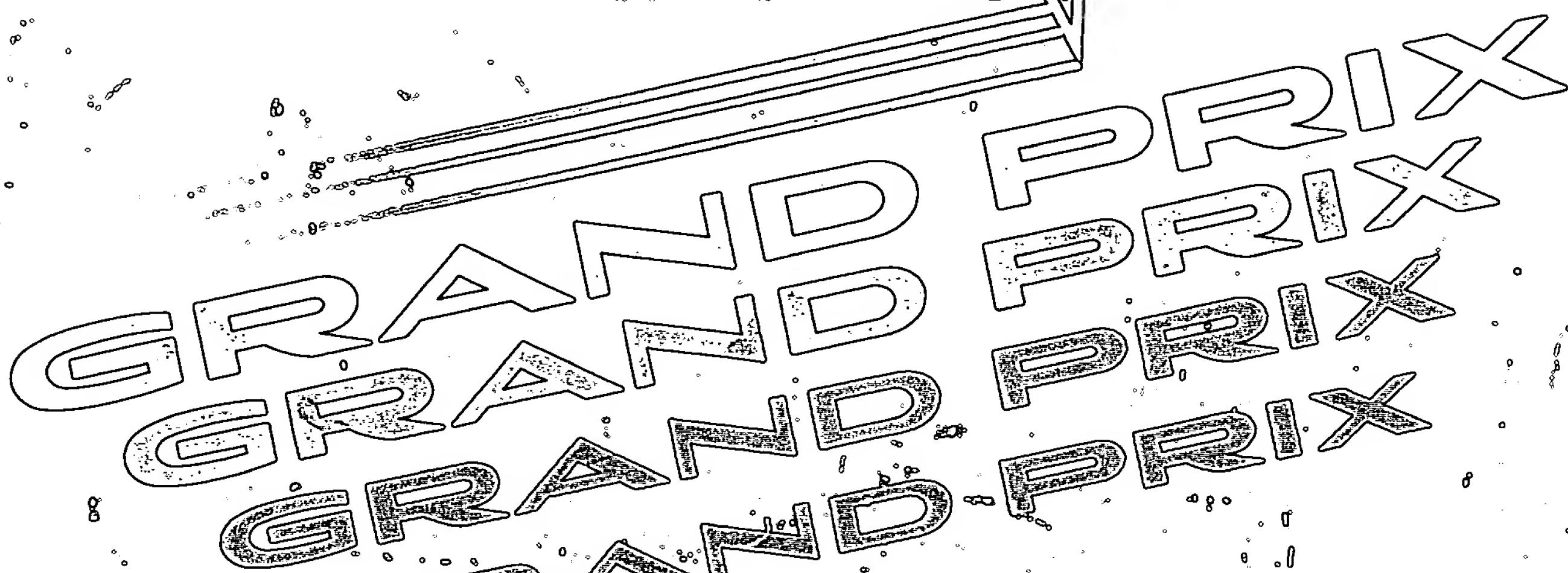
1. Turn ignition switch to ON or ON / ACCESSORY position and momentarily short the two terminals of the Program Connector (J4) (a two-pin connector taped to the wire assembly and accessed by removing the LH quarter access panel). All doors should lock then unlock. Remove shorting pin.
2. Press any button on transmitter. All doors should lock then unlock to verify the transmitter has been programmed. If door locks do not respond, press button again (up to three times maximum with the same transmitter). If door locks still fail to respond, go to Pinpoint Test F.
3. Repeat Step 2 to program additional transmitters into the remote entry receiver module (up to four transmitters maximum).
4. Turn ignition switch off. All doors should lock then unlock.
5. Check operation.

## GNOSIS AND TESTING

## Electrical Schematics

## Remote Entry





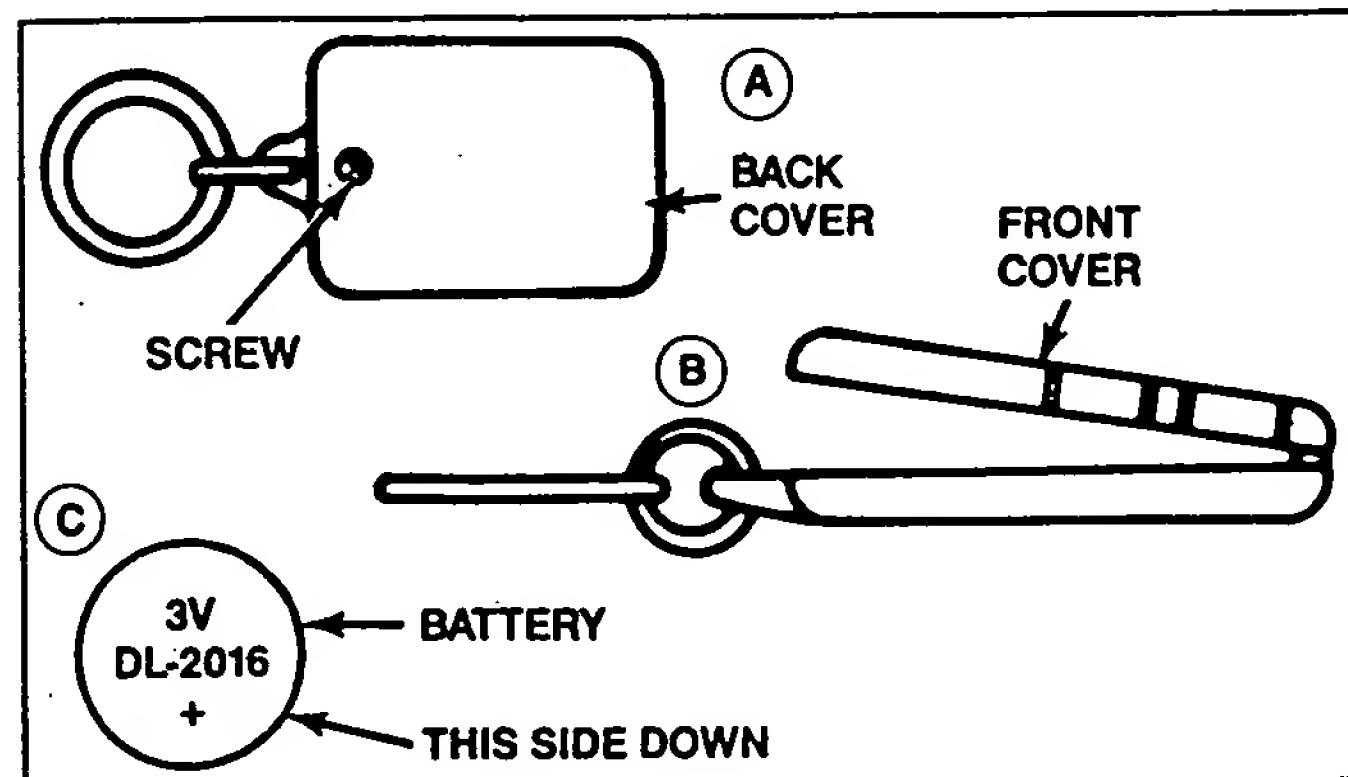
# 1989 PONTIAC OWNERS MANUAL

Keep with car at all times. Contains important operating, safety and maintenance instructions.

**Battery Replacement**

Transmitter batteries should last two years in normal use. Replace the batteries when transmitter range decreases. Use Duracell type DL-2016 or equivalent. To replace transmitter batteries:

1. Remove the screw (A) from the back cover.
2. Open the front cover (B) at the key ring side.
3. Remove and replace the batteries (C).



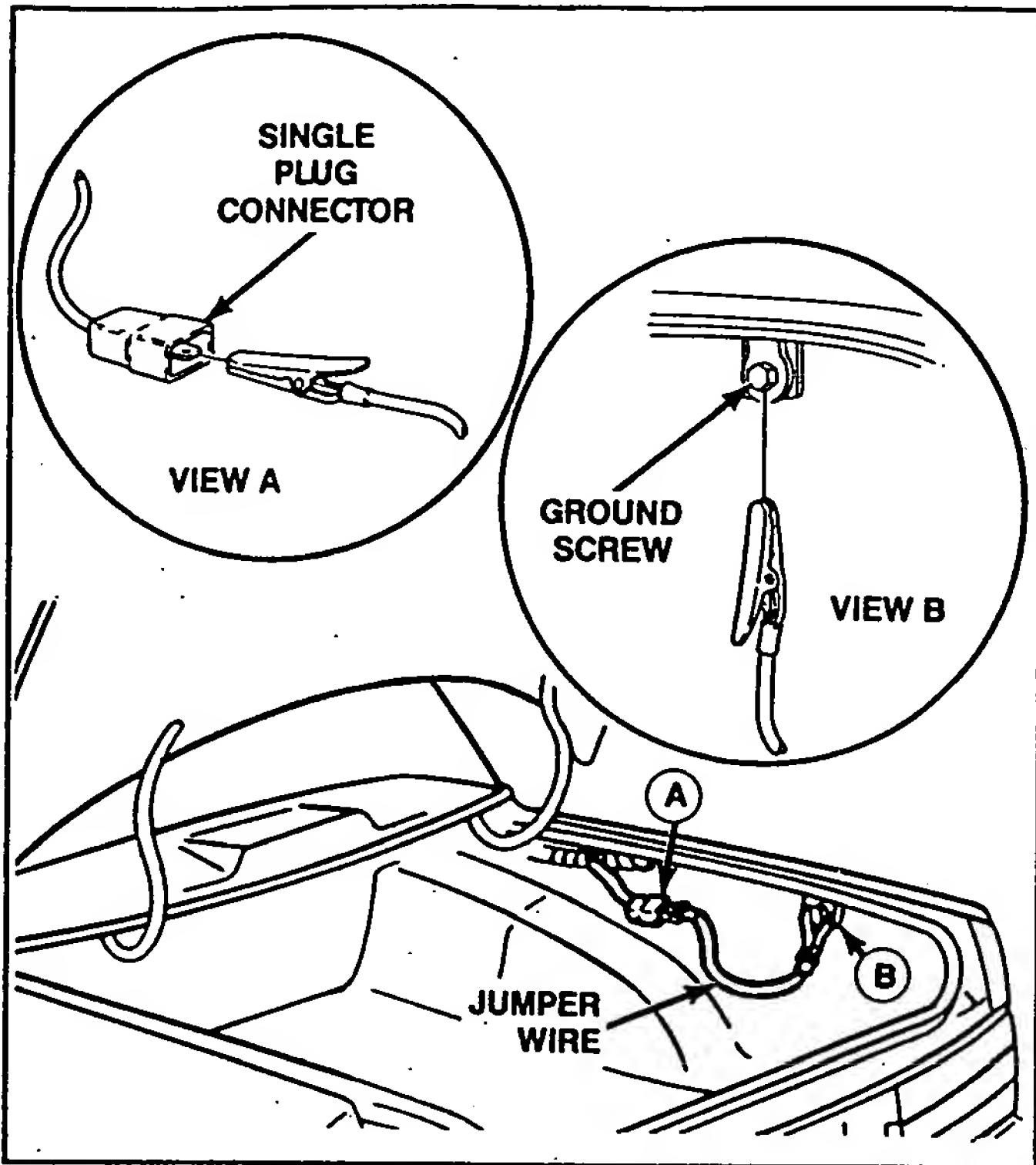
4. Assemble the transmitter in reverse order.
5. Check transmitter operation. If the lock control does not work as it should, see your Pontiac dealer.

(Note: Replacing transmitter batteries does not require matching the transmitter to the car again.)

**Matching Transmitter(s) to Car**

To match new or additional transmitter(s) to a car, do the following:

1. Have both transmitters that will be matched to the car present, even if only one is new. Remove the car keys from the ignition and have them in your possession.
2. Open the trunk and pull back the trunk side carpet on the passenger side. Locate a single plug connector hanging from the wire harness. This is the "Program" connector.
3. Use a jumper wire with alligator clips at both ends to "ground" the program connector to the antenna ground screw. Grounding the program terminal erases the system memory and causes the doors to lock and unlock once. This means the system is ready to be matched to new or different transmitters.
4. Keeping the program terminal grounded, press any button on the first transmitter. Regardless of which button was pushed, the door locks will lock and unlock again to indicate the transmitter is now matched. If there is no response, check the transmitter batteries. NOTE: If you do not want to match a second transmitter, proceed to step 6.
5. Still keeping the program terminal grounded, repeat Step 4 with the second transmitter. If you disconnect the ground wire before completing this step, or if you press the button



on the first transmitter more than once, only the first transmitter is matched. If you make a mistake, disconnect the jumper wire and start over at Step 3.

6. Remove the jumper wire. (Note: The system will not operate if the jumper wire is still connected.)
7. Test operation of both transmitters with the car.

If the lock control does not work as it should, see your Pontiac dealer.

#### DECK LID CARRIER

The optional deck lid luggage carrier is designed to allow loading of items onto the deck lid of your car. The carrier does not increase the total load-carrying capacity of the car, shown opposite "Max Load" on the Tire Placard on the driver's door. Be sure the total weight of the cargo on the deck lid, plus the weight of the cargo and passengers inside the car, plus the tongue load of any trailer you are towing, does not exceed this "Max Load" vehicle capacity weight. See "Tires" in Section 5 for more information on Vehicle Loading. If needed, see "Trailer Towing" in Section 2.

**NOTICE:** To help avoid damage to the car, do not exceed 23 kilograms (50 pounds) cargo weight on the deck lid. Position the cargo on the luggage carrier

(Continued)

- Doors can also be locked from outside by using the door lock key.

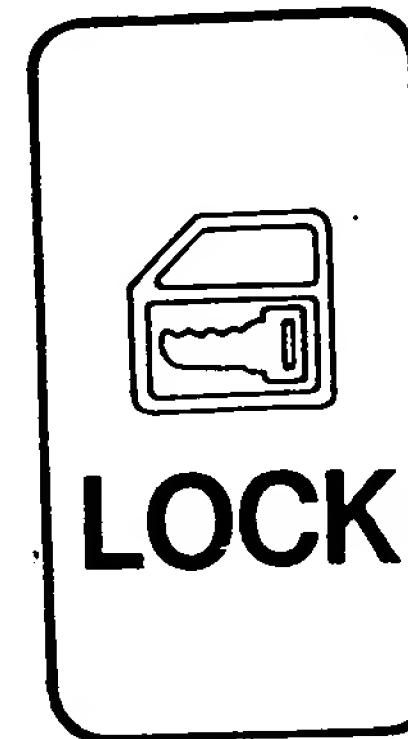
All models have a standard safety feature overriding door locks. When the doors are locked, both the inside and outside door latch mechanisms are inoperative, thus preventing inadvertent opening of the door by movement of the inside handle.

#### Always Lock The Doors

**CAUTION:** To help reduce the risk of personal injury in an accident, always lock the doors when driving. Along with using the safety belts properly, locking the doors helps prevent people from being thrown from the vehicle. It also helps prevent unintended opening of the doors and helps keep out intruders.

#### Power Door Locks (Optional)

Both doors may be locked or unlocked by operating the switch marked "LOCK," located on the door trim pad on cars equipped with power door locks. The electric locking mechanism does not at any time interfere with manual operation of any door lock lever. The doors will not unlock or open with the inside door handle when the power door lock switch has been actuated, but can be unlocked individually by sliding the lock lever. If the headlamps have been on, the driver's door lock switch will remain illuminated for a short time after the headlamps have been turned off. This helps locate the lock button when dark.

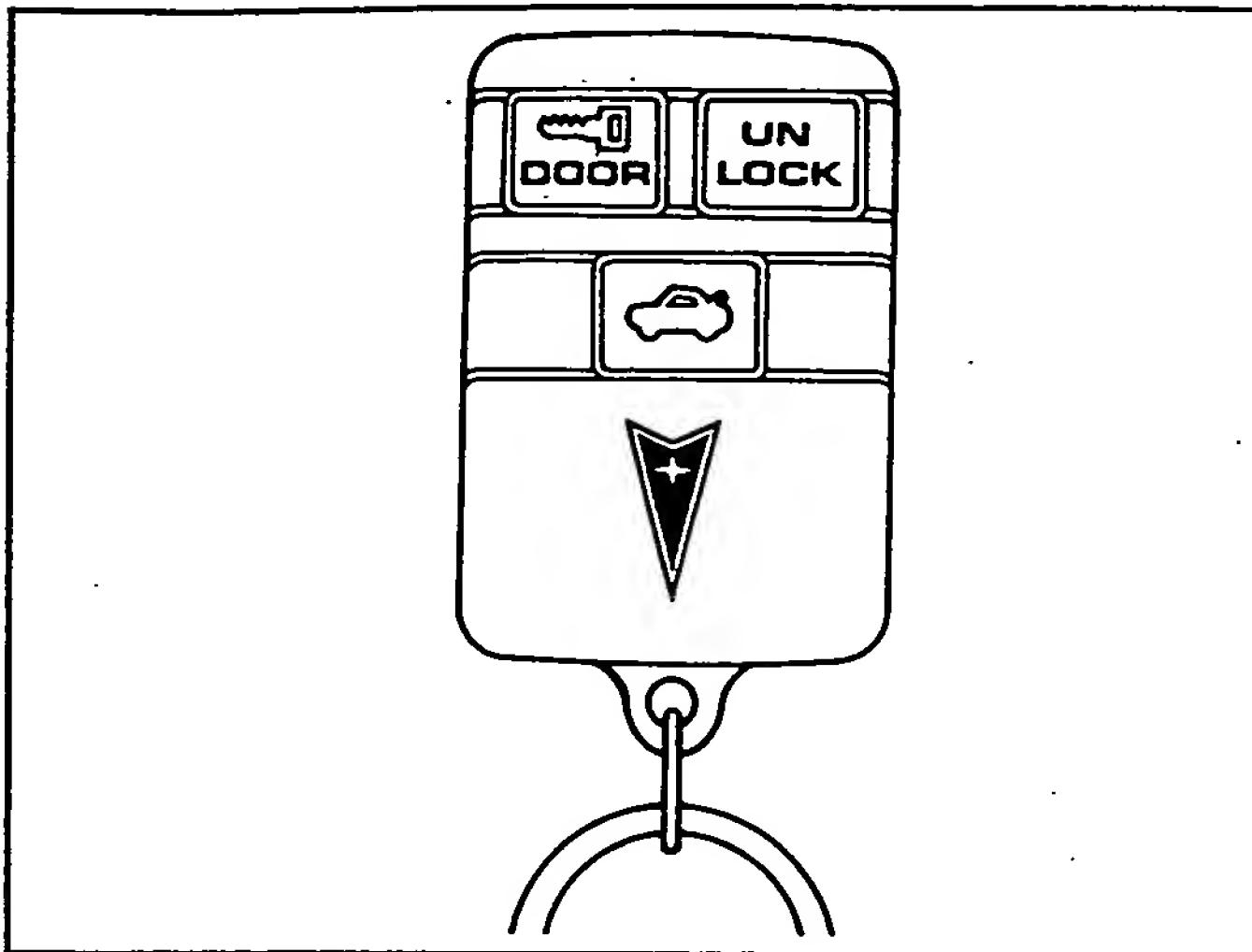


#### Remote Lock Control (Optional)

A key chain transmitter operates both door and trunk locks at a distance of up to 33 feet (10 meters). Actual distance will depend upon proximity to other cars and building structures. One transmitter comes with the car, but each car may be set to respond to as many as two transmitters. Additional transmitters are available from your Pontiac dealer. Instructions for matching the transmitter to the car are in section 2D.

- To unlock doors:

- Press and release "UNLOCK" once to unlock the driver's door only.
- Press and release "UNLOCK" a second time (within 1 to 5 seconds) to unlock the remaining doors.



- To lock doors:

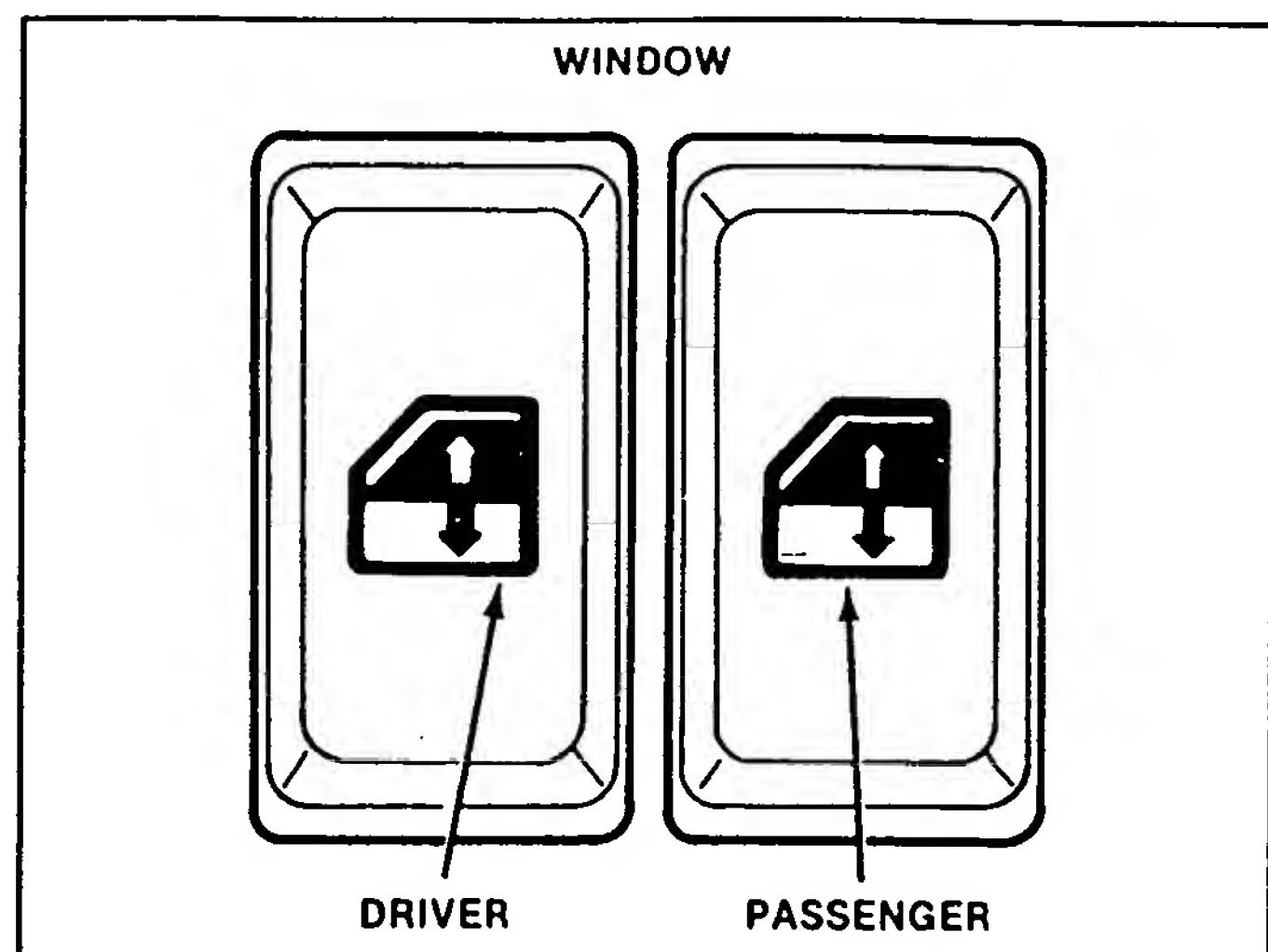
- Press and release "(KEY SYMBOL) DOOR" to lock all the doors.

- To release trunk lid:

- Press and release "(TRUNK OPEN SYMBOL)" to open trunk.

A key chain transmitter may be used with more than one car, but a transmitter will not open any car to which it has not been

matched. Each transmitter has a preset code that cannot be changed. This is to prevent a stranger from opening your car. (Note: If you have matched your transmitter to more than one car, care should be taken when the cars are parked near each other.) See Section 2D for additional information. For vehicles with automatic transmissions, the shift selector must be in "PARK" or "NEUTRAL" for the trunk release to function.



**1994  
Grand Cherokee**

**Jeep**

**1994**

**Jeep Grand Cherokee**

■ *Before Starting*

■ *Starting and Operating*

■ *In Case Of Emergency*

■ *Maintenance*

■ *Customer Assistance*

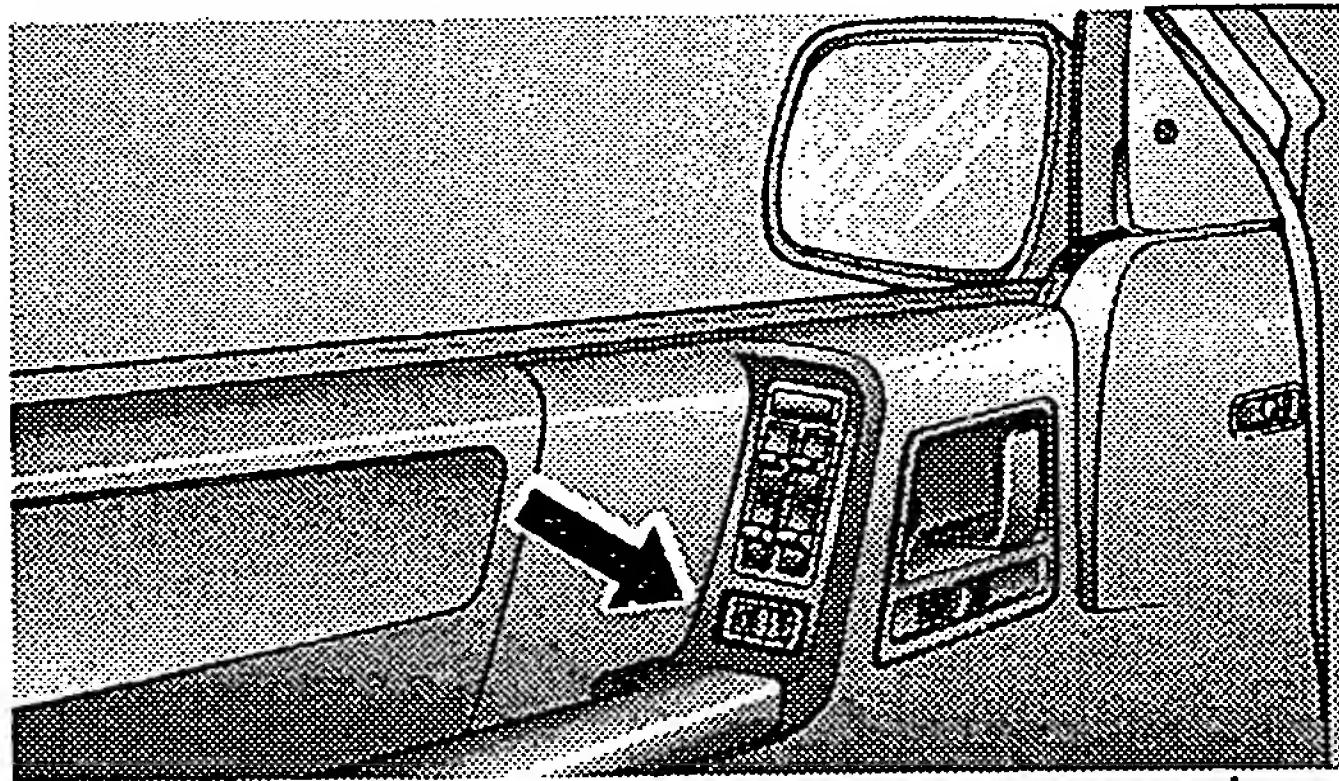
■ *Detailed Index*

## BEFORE STARTING YOUR VEHICLE

### Power Door Lock System

The power door locks are on a rocker-type switch. Depress the right side of the switch to Lock and the left side of the switch to Unlock. The driver's switch unlocks all doors including the liftgate.

As a safety feature the doors will not lock (using the power lock switch or keyless entry system) in either of these conditions:



1) The driver's door is open while the key is in the ignition;

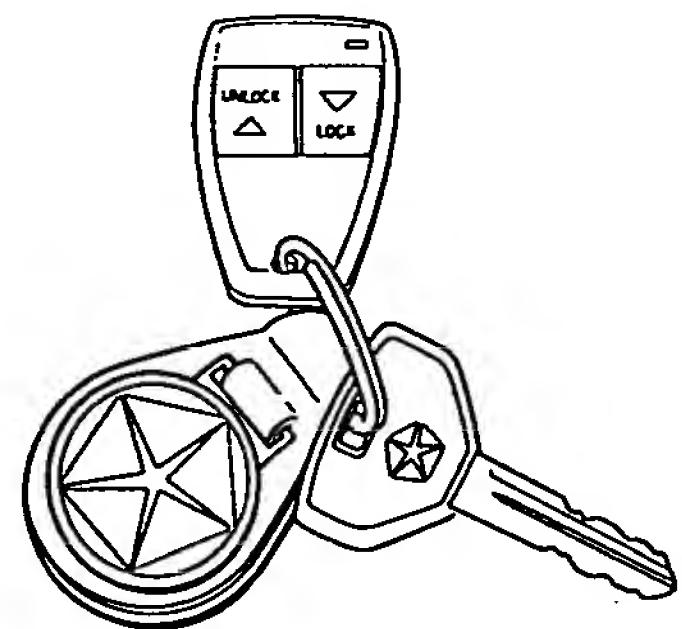
2) The driver's door is open while the headlights switch is On.

Once locked, the rear doors cannot be opened from the inside until the lock lever has been released. However, both the front doors can be opened using the inside door handle.

### KEYLESS ENTRY SYSTEM—Optional

The Keyless Entry System enables you to lock or unlock all the doors from a position outside the vehicle.

Operate the system by holding the keyring transmitter close to either side of the vehicle and pointing it at the receiver. The receiver is in the Dome Lamp



## BEFORE STARTING YOUR VEHICLE

assembly or in the middle of the overhead console. Press the finger pad "Lock" or "Unlock" buttons to activate.

The indicator light glows when the unit is operating to show that the transmitter batteries are OK. Battery life is approximately one year. Replace the batteries in the transmitter with two CR1616 3-volt batteries. Batteries must be installed correctly. The polarity, "+" or "-", is engraved on the case.

**NOTE:** The transmitter can be damaged if struck sharply. Do not drop or throw keys with transmitter attached.

The Keyless Entry transmitter is programmable. Use this procedure:

- Sit inside the vehicle and close all the doors.
- Place ignition in the OFF position.
- Open the driver's door and leave open during programming procedure.

- Move the mechanical door lock lever to the LOCK position.
- Turn ignition to the RUN position.
- Aim the transmitter at the Keyless Entry receiver in the overhead console or in the dome light assembly and press the Lock button.
- Hold the button until the light on the transmitter blinks twice. The door locks will cycle.
- Turn ignition OFF within 20 seconds.
- Check receiver memory by cycling the door locks using the transmitter.

Up to four transmitters may be programmed into a vehicle.

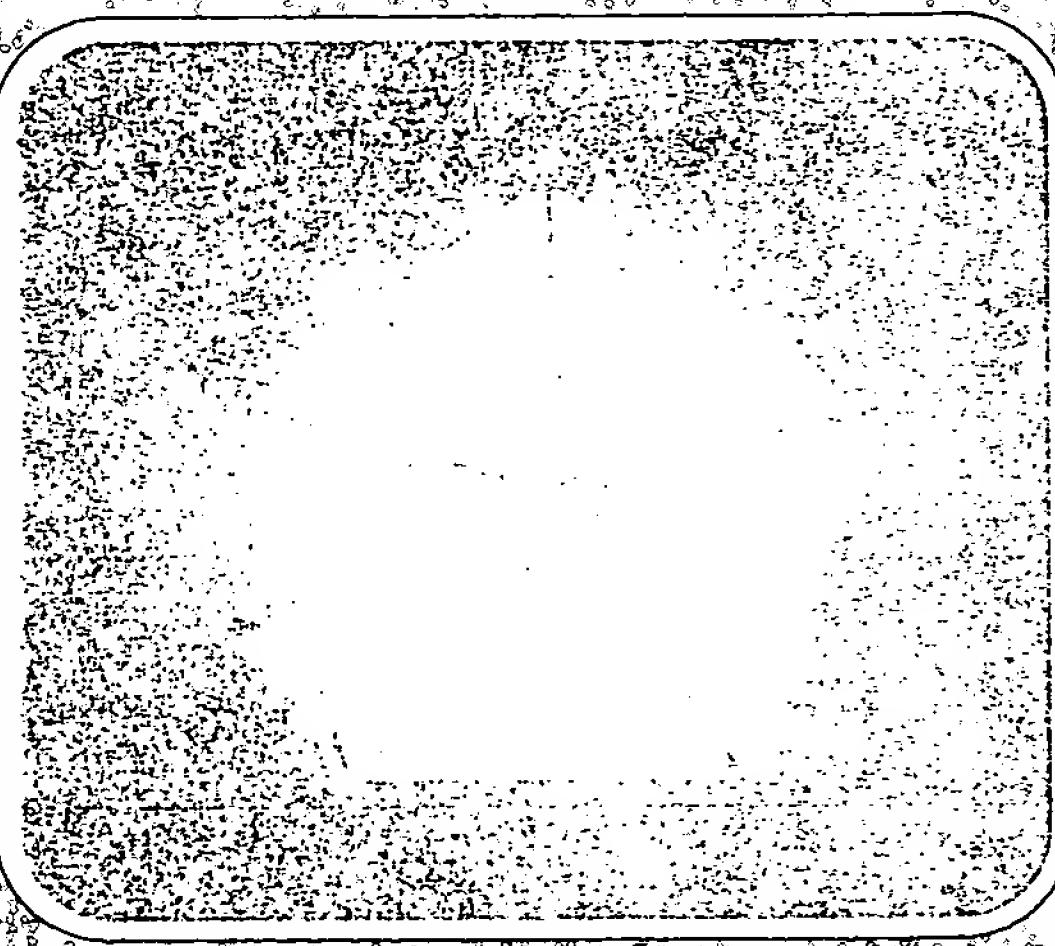
## ILLUMINATED ENTRY

All interior lamps will illuminate the vehicle when the doors are unlocked using the Keyless Entry transmitter or when a door is opened. These lamps will stay on for about 30 seconds or until the engine is started.

1993

# SERVICE MANUAL

TOWN & COUNTRY,  
CARAVAN, AND  
VOYAGER



FRONT WHEEL DRIVE  
ALL WHEEL DRIVE

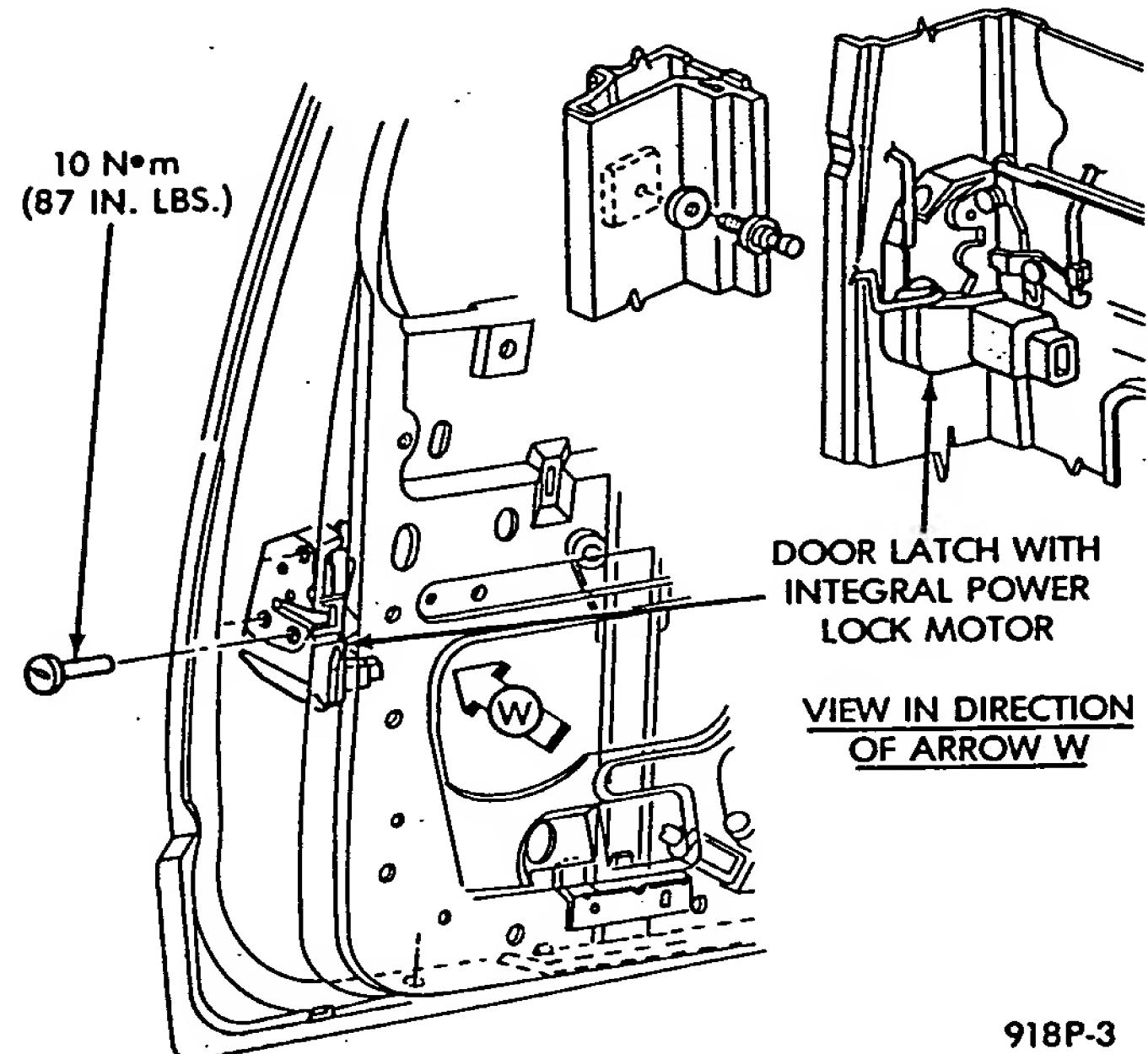


Fig. 5 Front Door Assembly

- (2) Remove plastic button, in upper right corner of door trim panel. Remove screw behind button and a second screw down towards the right middle of panel.
- (3) Remove three plastic retainers along bottom edge of panel.
- (4) Using a trim stick, start at top left side of panel and disengage trim clips.
- (5) Remove complete door trim panel.
- (6) Remove latch control assembly mounting bolts (Fig. 6).

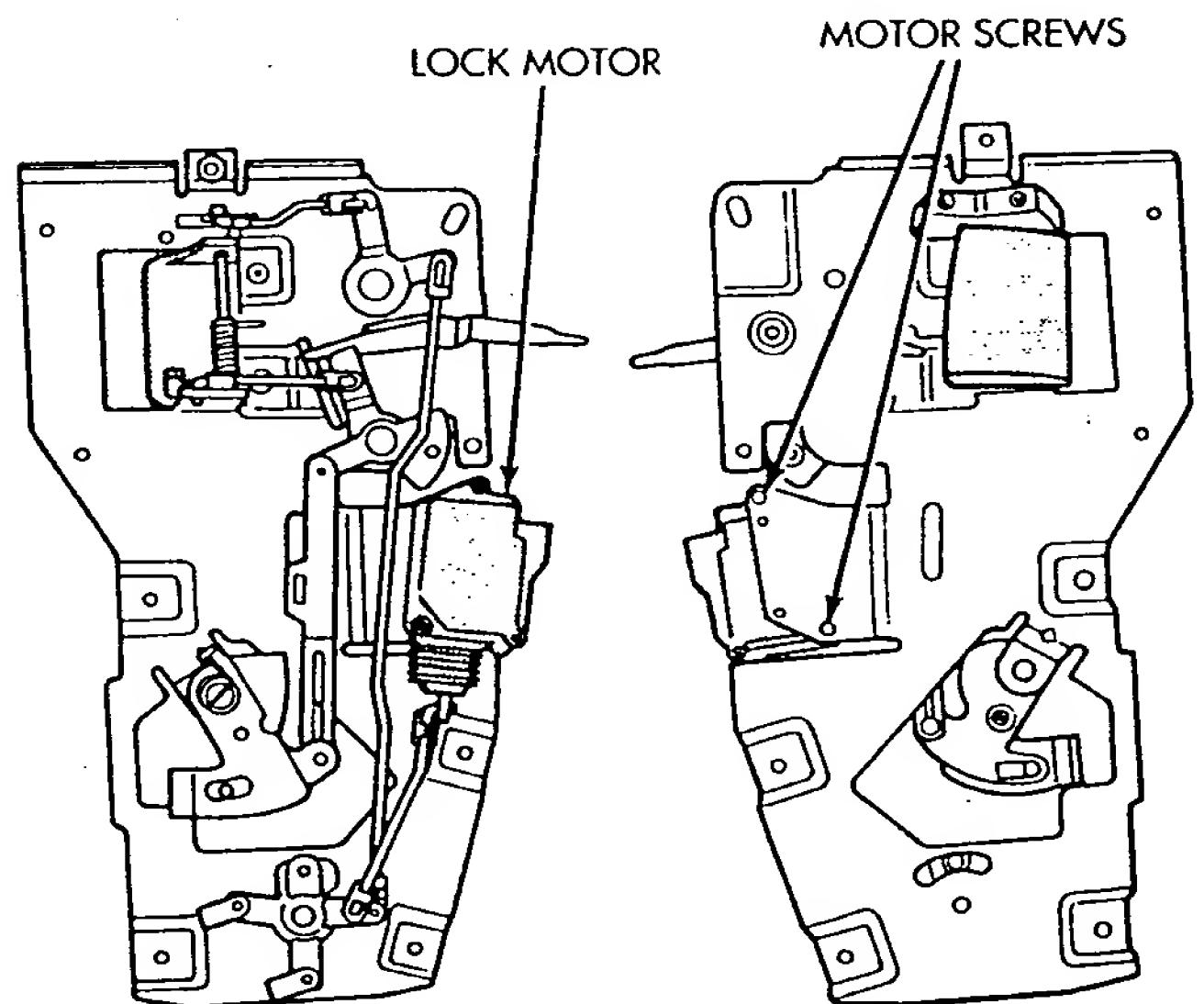


Fig. 6 Latch Control Assembly

- (7) To remove assembly, slide assembly to the right, pull outward slightly and let it hang towards the inside of vehicle.
- (8) Remove motor link at locking lever.
- (9) Disconnect motor power connector.
- (10) Remove motor mounting screws and motor from door.
- (11) For installation reverse above procedures.

## RELEASE SOLENOID REPLACEMENT LIFTGATE DOOR

- (1) Remove liftgate trim panel
- (2) Remove solenoid link at locking lever.
- (3) Disconnect solenoid power connector. 9
- (4) Remove solenoid mounting screws and motor from door.

## INSTALLATION

- (1) Install solenoid and tighten screws to 3 N·m (25 in. lbs.) torque.
- (2) Connect solenoid link to locking lever and connect solenoid power connector.
- (3) Install door trim panel.

## REMOTE KEYLESS ENTRY

### OPERATION

The transmitter has three buttons for operation (Fig. 7).

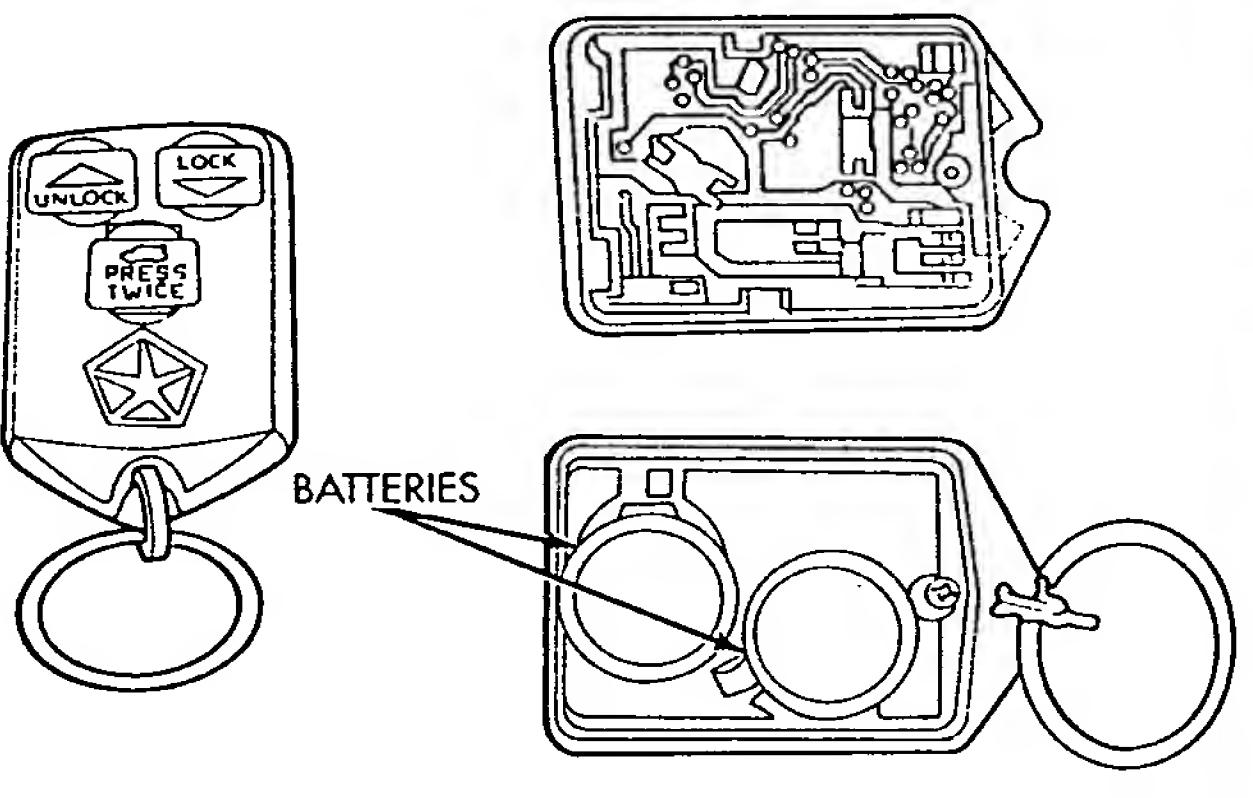


Fig. 7 Transmitter

- UNLOCK driver's door, enable illuminated entry. Pushing and releasing the button once will unlock the driver's door. Two times within five seconds all doors will unlock.
- LOCK all doors and chirp horn. The chirp of horn verifies the lock signal was received.
- Unlock Liftgate by pressing and releasing the button two times within five seconds.
- The receiver is capable of retaining the transmitters in memory even when power is removed.

- Each receiver must have at least one and no more than two transmitters.

### CONTROL RANGE

Operation range is within 7 meters (23 ft.) of the receiver.

### TRANSMITTER BATTERY

The battery can be removed without special tools and are readily available at local retail stores. The recommended battery is Duracell DL 2016 or equivalent. Battery life is about one to two years.

### PROGRAM REMOTE KEYLESS ENTRY

- (1) Open and lower glove box door.
- (2) Locate program line a dark green wire with a molded insulator on the end. Located behind and lower end of the glove box.
- (3) Turn ignition switch to the ON position.
- (4) Connect the program line from the Remote Keyless Entry Module to ground. The door locks will lock and unlock to indicate the receiver is ready to receive transmitter code. Liftgate solenoid will not cycle.
- (5) Press any button on the transmitter to set code. If there is a second transmitter it has to be set at this time. The locks will cycle to confirm programming.
- (6) Disconnect the program line from ground. This returns the system to its normal operation mode.
- (7) Install glove box to original position

### HORN CHIRP CANCELLATION

During the programming operation the horn chirp can be disabled using the following procedures:

- (1) Open and lower glove box door.
- (2) Locate program line a dark green wire with a molded insulator on the end. Located behind and lower end of the glove box.
- (3) Turn ignition switch to the ON position.
- (4) Connect the program line from the Remote Keyless Entry Module to ground. The door locks will lock and unlock to indicate the receiver is ready to receive transmitter code. Liftgate solenoid will not cycle.
- (5) Press any button on the transmitter to set code. If there is a second transmitter it has to be set at this time. The locks will cycle to confirm programming.
- (6) Press LOCK then UNLOCK transmitter buttons repeat three times.
- (7) Door locks and rear release will cycle three times as feedback of Horn Chirp lockout.
- (8) Remove ground from program line to restore normal system operation.
- (9) To reinstate the Horn Chirp feature refer to Program Remote Keyless Entry.

### TESTING

**CONDITION:** When trying to program the receiver module in the vehicle with a new transmitter and there is no response from the module, Example: the door locks do not cycle through a lock/unlock routine. Refer to Fig. 8 for a block wiring diagram or to Group 8W, Wiring Diagrams.

(1) Be sure that the module has a battery feed from the 15 amp fuse in cavity 1 of the black connector. Also affected would be:

- Interior lights
- Power mirrors
- Radio memory
- Body control module

(2) Be sure that the module has an ignition feed from 10 Amp fuse in cavity 7 of the blue connector. Also affected would be the body computer, instrument cluster and message center.

(3) Be sure that the module has a ground to the cavity 5 of the black connector.

(4) Be sure that you are supplying a good ground to the programming wire.

(5) If the above circuits are good, replace the Receiver Module.

**CONDITION:** Doors can be locked or unlocked with the Keyless Entry transmitter. But the doors will not lock from the switch.

Check the connection from door lock switch to RKE module.

**CONDITION:** All doors except driver's door will lock with the transmitter.

(1) Test the driver's door output of the Receiver Module for a battery voltage.

(2) If there is no voltage at the pin, replace the Receiver module.

(3) If there is a battery voltage at the output, check the motor for battery voltage. If voltage OK, replace the door lock motor. If not OK, repair as necessary.

**CONDITION:** Only driver's door will lock with the transmitter.

- Repair ground circuit to unlock relay or the circuit from the motors to the relay.

- Replace unlock relay

**CONDITION:** Doors do not lock with transmitter but lock using switch and still has horn CHIRP indicating they did lock.

Check circuit from remote keyless entry module to the body control module. Check for proper connection and that terminals are fully seated. If circuits are OK replace receiver module.

**CONDITION:** Doors will lock with the transmitter but there is no horn CHIRP.

(1) Press horn button, listen horn sound.

(2) If the horn sounded, check continuity between horn relay and RKE module. If no horn, check the horn relay operation and wiring to horns.

# 1994 ACCESSORIES & EQUIPMENT

## Remote Keyless Entry System – “N” Body

**“N” Body: Achieva, Grand Am, Skylark**

### DESCRIPTION & OPERATION

Remote keyless entry system allows driver to unlock driver's door, unlock all doors, lock all doors, or release trunk lid by using a hand held transmitter. Maximum transmitter range is approximately 23 ft. If transmitter range becomes less than 23 ft., batteries in transmitter may need replacement. Keyless entry system also incorporates illuminated entry system.

### PROGRAMMING PROCEDURE

- 1) Keyless entry modules (receivers) can be programmed to receive 2 Vehicle Access Codes (VAC). Two transmitters may be used to operate remote control lock system. In addition, several vehicles, each with keyless entry, may be programmed to operate from same transmitter or 2 different transmitters.
- 2) During programming of keyless entry module receiver, feedback is provided by receiver by cycling door locks. To program a keyless entry module receiver to match the VAC of 1-2 transmitters, use a jumper wire and jumper 2 terminals of keyless entry module program connector. Program connector is located in front of left rear inner wheel panel, inside trunk. See Fig. 1.

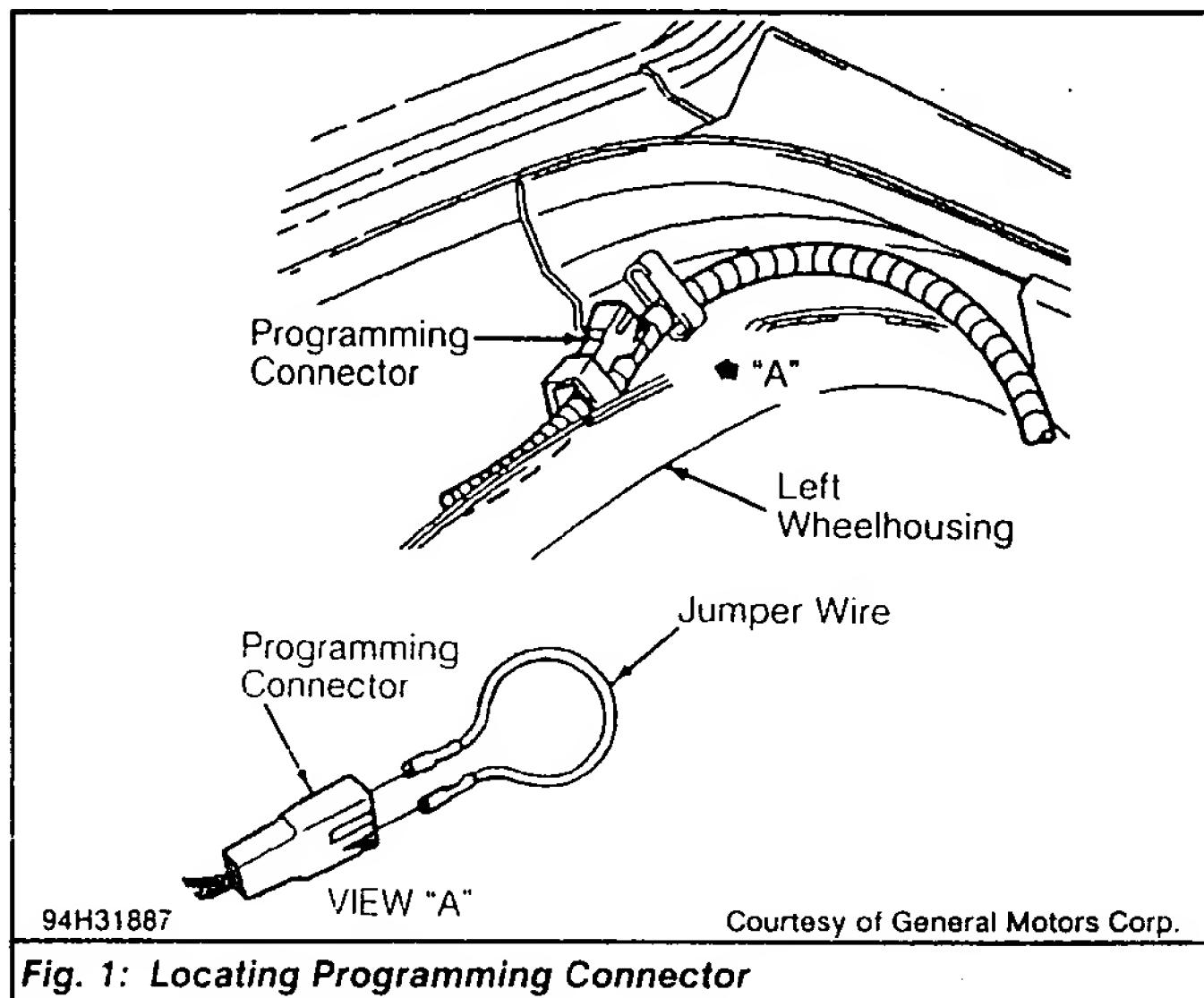


Fig. 1: Locating Programming Connector

- 3) Program connector contains 2 terminals. Tan wire in terminal "A" is programming lead, and Black wire in terminal "B" is a ground. Jumping terminal "A" to "B" will initiate program mode. Module will cycle door locks as an indication of program mode feedback.
- 4) Press one button on transmitter one time to store VAC code for that transmitter. Door locks will cycle as feedback.
- 5) If only one transmitter is being programmed, go to next step. If more than one transmitter is being programmed, press one button on second transmitter to store second transmitter's VAC. First transmitter's VAC is retained. Door locks will cycle as feedback. If a second VAC signal is not received before programming harness is removed, receiver will be programmed to first transmitter's VAC only. This procedure prevents unauthorized programming.
- 6) Remove jumper wire from program connector. Verify proper operation of keyless entry system.

**NOTE: Do not leave door lock key in vehicle while programming keyless entry module. This will prevent unintentional lock out if programming procedure is not correctly performed.**

### TROUBLE SHOOTING

**NOTE: If vehicle is left for 24 or more days without ignition put in RUN position, keyless entry will be disabled to decrease battery drain. Putting Ignition switch in RUN will restore system.**

1) Ensure all grounds and terminal contacts are clean and tight. Check GAUGES fuse by observing instrument cluster gauges. Check CTSY fuse by operating power door locks. Check battery transmitter terminals.

2) Try a known good second transmitter. If it works, change batteries in first transmitter and try it again. If it still does not work, replace transmitter.

### DIAGNOSIS & TESTING

#### REMOTE KEYLESS ENTRY & ILLUMINATED ENTRY

**Illuminated Entry Lights Do Not Operate Properly** – Disconnect RKE module connector C2. Check for battery voltage at RKE module connector C2 terminal "F" (White wire). If battery voltage is not present, check for open circuit or short to ground in White wire.

**Trunk Lid Release Does Not Operate Properly From Transmitters** –  
1) Disconnect RKE module connector C1. Turn ignition switch to RUN position. Check for battery voltage at module connector C1 terminal "B" (Pink wire). If battery voltage is present, go to next step. If battery voltage is not present, check for open circuit or short to ground in Pink wire.

2) Disconnect RKE module connector C2. Connect jumper wire between module connector C2 terminal "B" (Black wire) and voltage. If trunk lid release solenoid activates, go to next step. If trunk lid release solenoid does not activate, check Black wire for an open circuit.

3) Put transmission in Park or Neutral. With RKE module connector C2 still disconnected, ensure continuity is present between terminal "G" (White/Black wire) and ground. If continuity is not present, check White/Black wire for an open circuit or short to voltage. If all checks are to specification, replace RKE module.

**Both Transmitters Do Not Operate Some Or All Features** – 1) Disconnect RKE module connector C1. Ensure continuity is present between connector terminal "F" (Black/White wire) and program connector terminal "A" (Black/White wire). If continuity is to specification, go to next step. If continuity is not to specification, check Black/White wire for an open circuit.

2) Turn ignition switch to RUN position. Check for battery voltage at module connector C1 terminal "B" (Pink wire). If battery voltage is present, reconnect connector and go to next step. If battery voltage is not present, check for open circuit or short to ground in Pink wire.

3) Disconnect RKE module connector C2. If battery voltage is present at connector terminal "A" (Orange wire), go to next step. If battery voltage is not present, check Orange wire for an open circuit.

4) Ensure RKE module connector C2 is still disconnected. Connect jumper wire between module connector C2 terminal "B" (Black wire) and voltage. If trunk lid release solenoid activates, go to next step. If trunk lid release solenoid does not activate, check Black wire for an open circuit.

5) Ensure RKE module connector C2 is still disconnected. Connect jumper wire between module connector C2 terminal "C" (Tan wire). If driver's door unlocks, go to next step. If driver's door does not unlock, check Tan wire and Gray wire at door lock motor for an open circuit.

6) Ensure RKE module connector C2 is still disconnected. Hold either door lock switch in unlock position. If battery voltage is present at module connector C2 terminal "D" (White wire), go to next step. If battery voltage is not present, check White wire for an open circuit.

7) Ensure RKE module connector C2 is still disconnected. Hold either door lock switch in lock position. If battery voltage is present at module connector C2 terminal "E" (Light Blue wire), go to next step. If battery voltage is not present, check Light Blue wire for an open circuit.

8) Ensure RKE module connector C2 is still disconnected. If battery voltage is present at module connector C2 terminal "F" (White wire), go to next step. If battery voltage is not present, check White wire for an open circuit.

9) Put transmission in Park or Neutral. With RKE module connector C2 still disconnected, ensure continuity is present between terminal "G" (White/Black wire) and ground. If continuity is not present, check White/Black wire for an open circuit or short to voltage. If all checks are to specification, replace RKE module.

# 1994 ACCESSORIES & EQUIPMENT

## Remote Keyless Entry System – Corvette (Cont.)

### EXITING TROUBLE CODE DIAGNOSIS

Diagnostic mode will be exited whenever grounding of diagnostic mode input is removed. Receiver will return to transmitter in range/ignition mode after exiting diagnosis.

### TRANSMITTER PROGRAMMING

**NOTE:** Ensure radio is turned off when programming PKE system.

- 1) Turn ignition switch to RUN position. Push and release TRIP ODO button. Push TRIP ODO button again and hold for 5 seconds.
- 2) Within 5 seconds, push and hold Fuel INFO button for 10 seconds. PASSIVE KEYLESS ENTRY light should come on continuously.
- 3) Turn ignition switch to LOCK position and leave key in ignition. PASSIVE KEYLESS ENTRY light should begin flashing the number of the transmitter to be programmed (once for first transmitter, twice for second, etc.)
- 4) When transistor is programmed and code stored, light will illuminate continuously as long as that transmitter remains within reception range.

### REMOVAL & INSTALLATION

**NOTE:** See PKE COMPONENT LOCATION table.

#### DOOR ANTENNA

**Removal & Installation** – Remove door outside protective molding. Remove door trim panel. Remove door accessory mounting plate. Drill out antenna mounting rivets. Disconnect harness connector and retaining clip. Remove antenna by pulling firmly on each adhesive pad. See Fig. 1. To install, reverse removal procedure.

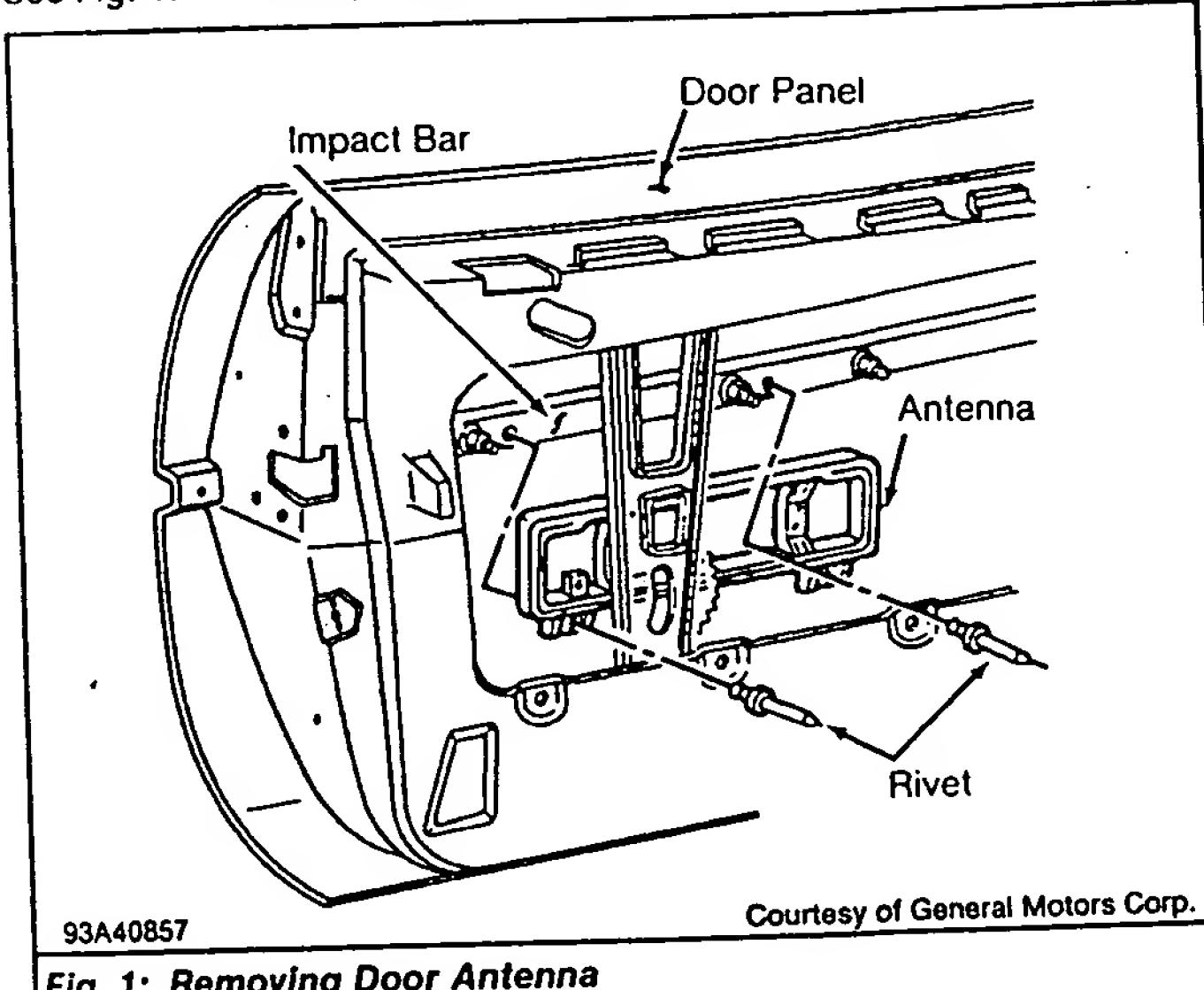


Fig. 1: Removing Door Antenna

#### REAR ANTENNA – COUPE

**Removal & Installation** – Open rear lift window hatch. Remove rear floor stowage compartment handle. Separate hook and loop fastener from stowage compartment doors and move carpeting out of way. To access antenna, fold down carpet insulator. Disconnect electrical connector. Drill out mounting rivets. Remove antenna by pulling firmly on each adhesive pad. See Fig. 2. To install, reverse removal procedure.

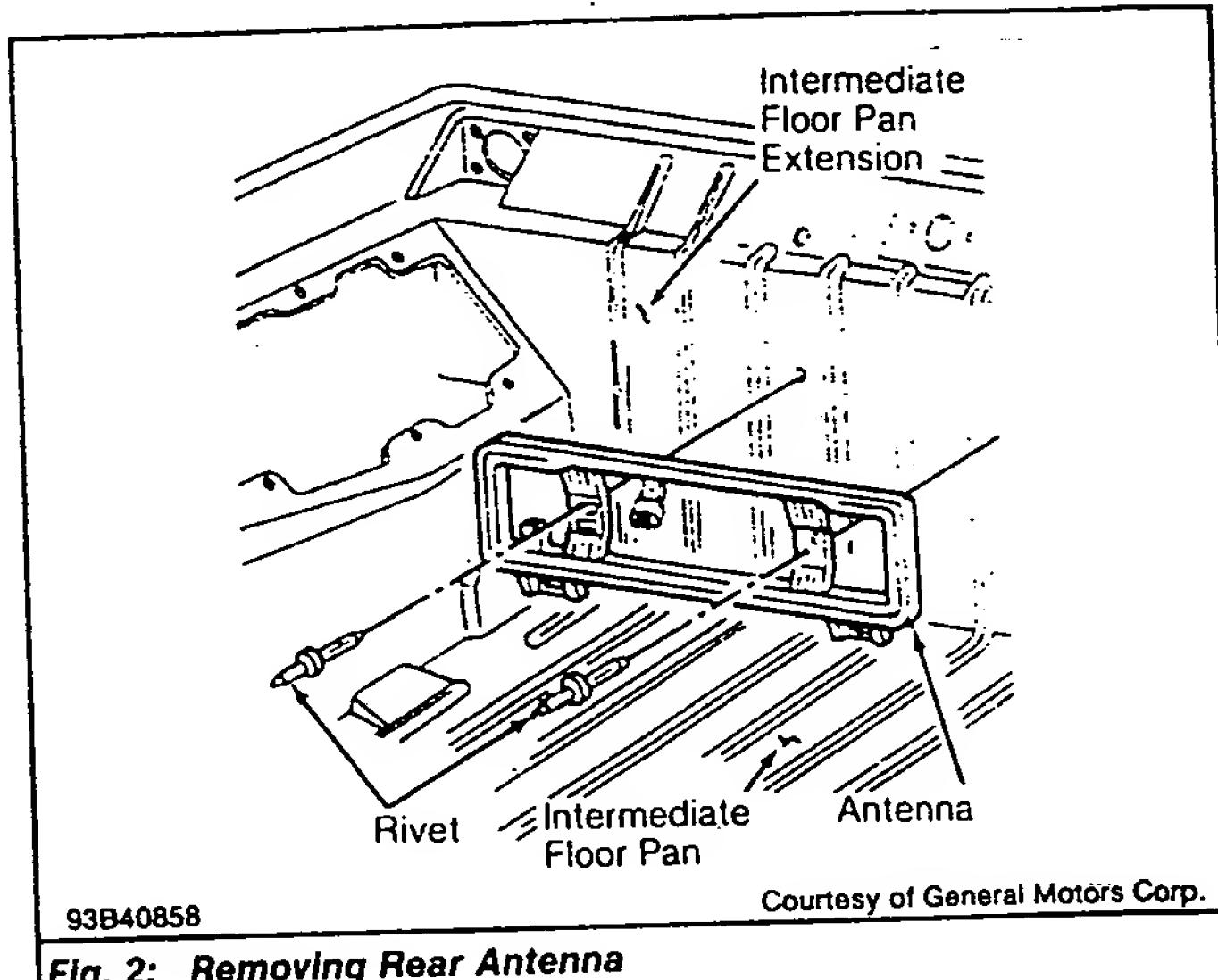


Fig. 2: Removing Rear Antenna

#### PKE RECEIVER

**Removal & Installation** – Remove instrument panel upper trim pad. Remove chime module from receiver by pulling firmly on module to separate hook and loop fastener. Remove receiver from retainer. See Fig. 3. Disconnect electrical connector. To install, reverse removal procedure.

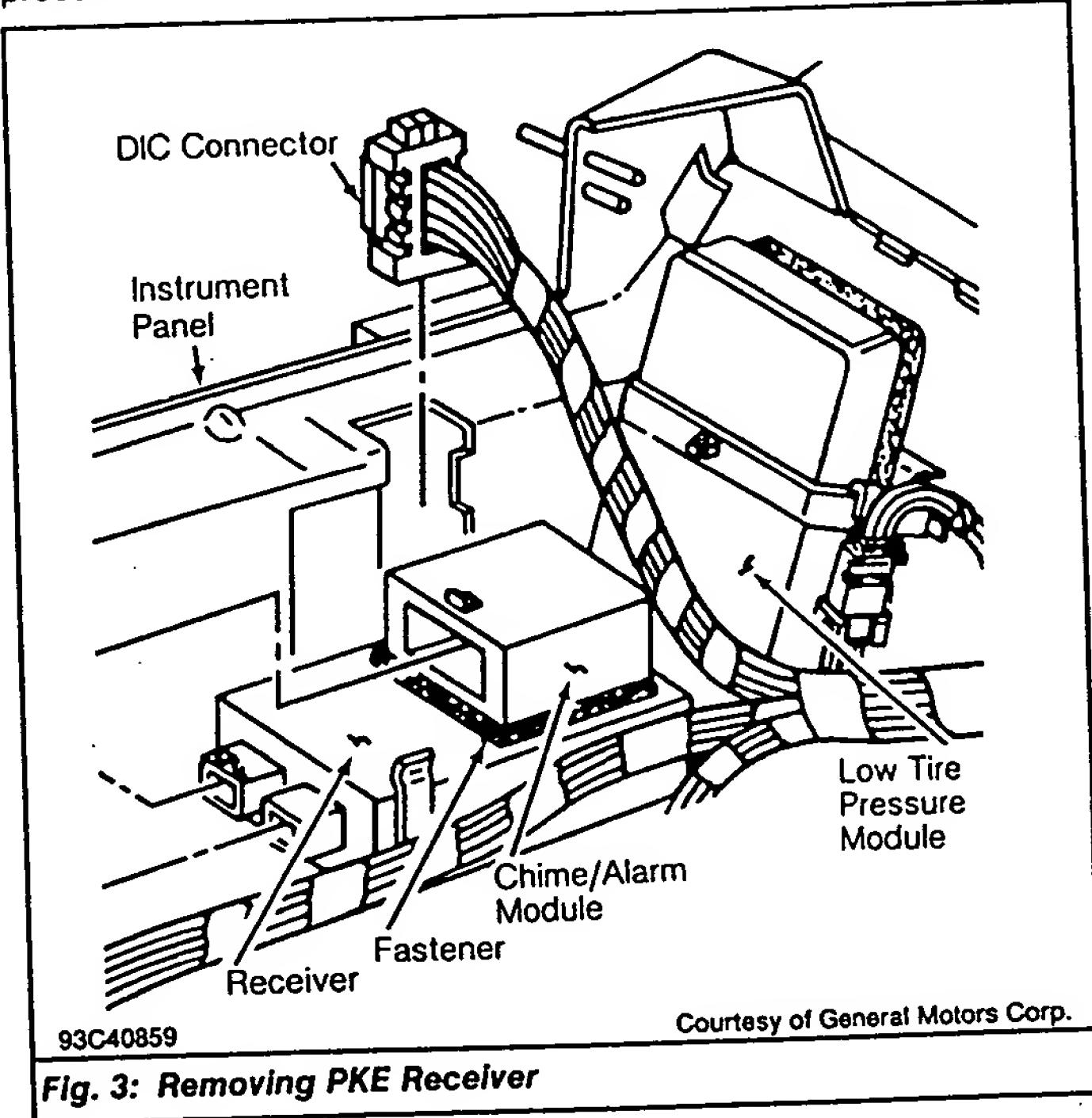


Fig. 3: Removing PKE Receiver

# 1994 ACCESSORIES & EQUIPMENT

## Remote Keyless Entry System – Mustang

### DESCRIPTION & OPERATION

The remote keyless entry system has 3 major components: an Electronic Door Lock Control Processor (EDLCP), also called a control module, located in the trunk behind the left trim panel; an antenna, located under the quarter trim panel; and a remote transmitter, carried by the driver.

When the operator presses the appropriate transmitter button, the system locks and unlocks doors and the trunk, activates or deactivates the security system, and turns on convenience lights. A battery saver feature shuts off power to convenience lights 45 minutes after the last input to the processor.

### TRANSMITTER PROGRAMMING

- 1) Turn ignition on. Remove left trim panel from trunk. Momentarily connect terminals of 2-pin program connector, located next to EDLCP, taped to harness. All doors should lock, then unlock. Break connection at program connector.
- 2) Press any button on transmitter. Doors should lock and unlock to verify that transmitter has been programmed. If doors do not lock, try again up to 3 times. If door locks fail to respond, go to DOOR LOCK SOLENOID TEST under TESTING.
- 3) Repeat step 2) to program additional transmitters. Up to 4 transmitters may be programmed. Turn ignition off. Check system operation.

### TRANSMITTER BATTERIES

Open transmitter by inserting coin between halves and twisting. Carefully swing contacts from old batteries. Insert new batteries with positive terminal downward. Carefully swing contacts into position. Snap transmitter halves together.

### TROUBLE SHOOTING

Before performing individual component tests, check the following for possible cause of system malfunction.

- Binding Linkage
- Binding Locks or Latches
- Misaligned Door
- Misaligned Trunk Lid
- Faulty Fuse(s)
- Loose or Corroded Connectors
- Damaged Wiring
- Damaged Transmitter
- Faulty Transmitter Batteries

### TESTING

#### DOOR LOCK SOLENOID TEST

**CAUTION:** When performing the following test, do not apply power to solenoid longer than 5 seconds.

- 1) Apply 12 volts to actuator terminals. Actuator solenoid should operate. Actuator rod should complete its travel in less than one second. Transpose leads to actuator solenoid. Solenoid should operate in reverse direction at same speed.
- 2) Measure actuator solenoid current. Transpose jumper leads to measure reverse current. Replace solenoid if current exceeds 6 amps, or if operation is not as specified.

### REMOVAL & INSTALLATION

**CAUTION:** When battery is disconnected, vehicle computer and memory systems may lose memory data. Driveability problems may exist until computer systems have completed a relearn cycle. See COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION before disconnecting battery.

### ANTENNA

**NOTE:** Antenna is part of main harness. DO NOT remove damaged antenna from harness.

**Removal & Installation** – 1) Unplug antenna connector from EDLCP. Tape securely out of way. On convertible, remove plastic tube portion of antenna, located behind rear seats. Tape securely out of way. 2) On all models, connect new antenna lead to EDLCP. Install new antenna along path followed by damaged antenna, using tape or wire wraps approved for the purpose.

### CONTROL MODULE (EDLCP)

**Removal & Installation** – 1) Disconnect negative battery cable. Open trunk. Remove left trim panel. Disengage relay panel retaining tabs. Lower relay panel. 2) Remove EDLCP. Unplug harness connectors. Unplug antenna connector. To install, reverse removal procedure.

### DOOR LOCK SOLENOID

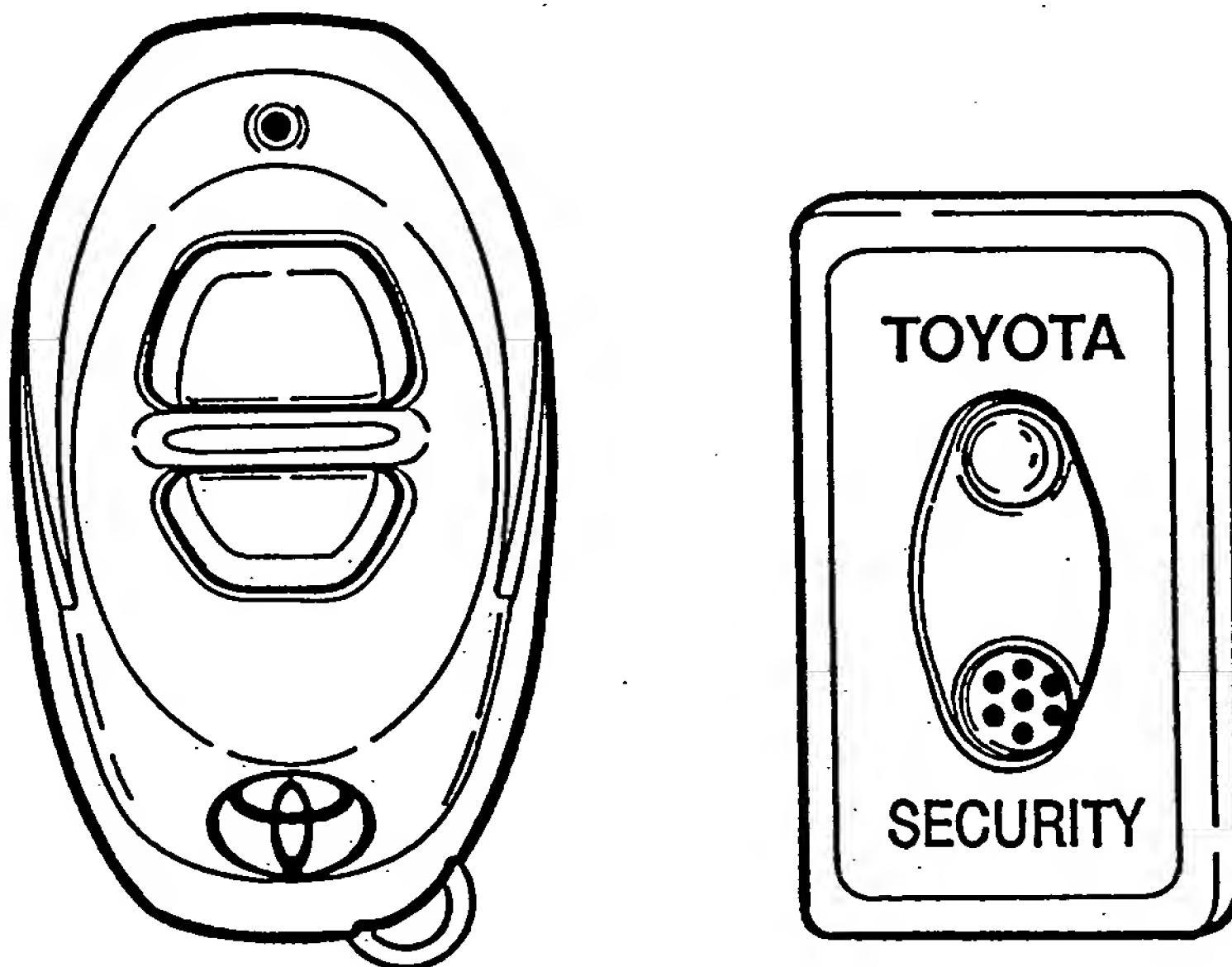
**Removal & Installation** – Remove door trim panel and watershield. Loosen latch mechanism, if necessary, to provide access to solenoid. Drill out rivets to remove solenoid. To install, reverse removal procedure. Secure solenoid with new rivets.



VEHICLE INTRUSION PROTECTION

RS3000

REMOTE CONTROLLED SECURITY SYSTEM  
DESIGNED SPECIFICALLY FOR YOUR TOYOTA VEHICLE



OWNER'S GUIDE

Rev. Date 6/15/95

## PROGRAMMING AND ADJUSTMENTS

### REMOTE CONTROL PROGRAMMING

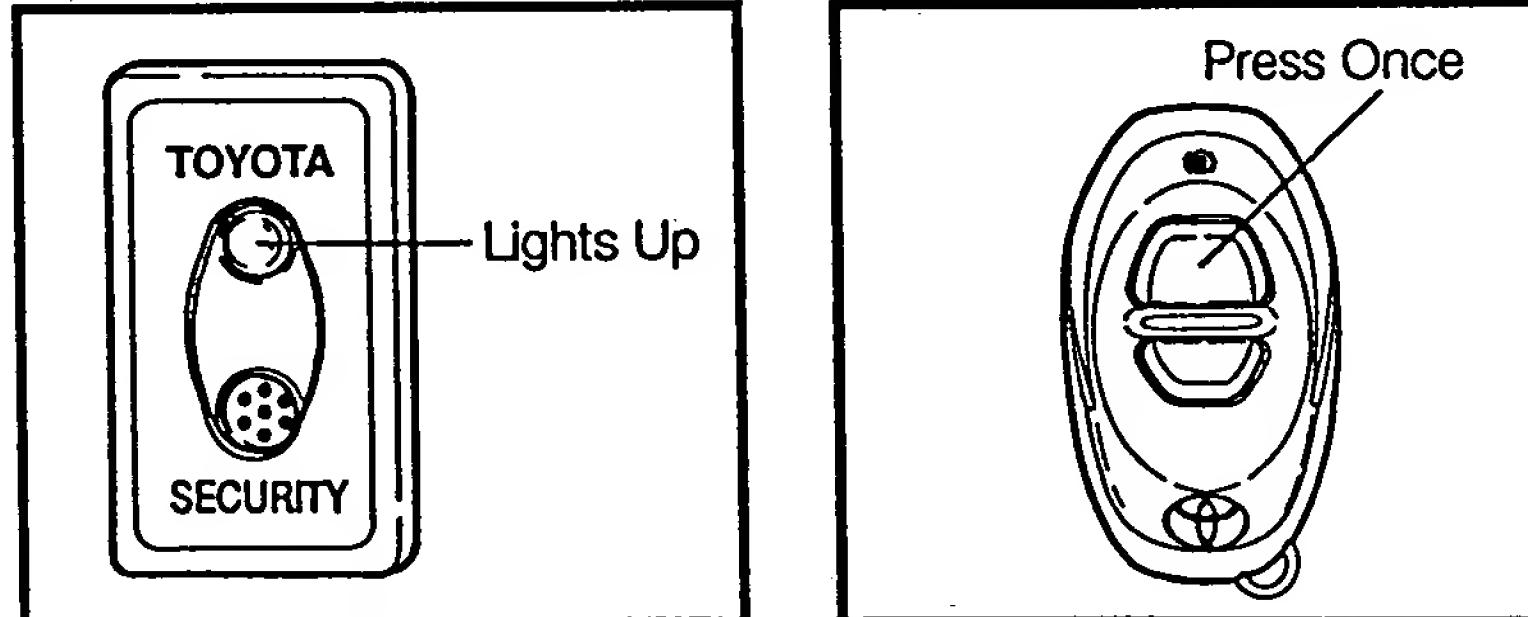
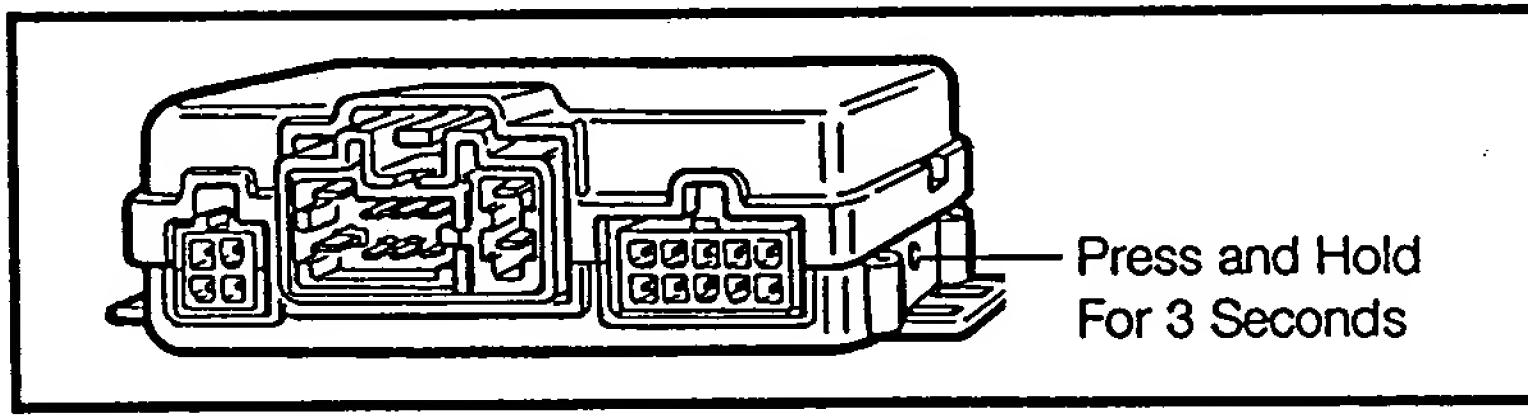
The RS3000 ECU can be programmed to be operated by as many as 4 REMOTE CONTROLS. Additionally, a REMOTE CONTROL's top and bottom buttons may be assigned to operate different vehicles' RS3000 or Keyless Entry Systems, and both buttons can be programmed to operate the system in one vehicle. To add or delete a REMOTE CONTROL, you must access the RS3000 ECU (computer); ECU location varies by vehicle, and vehicle model.

**NOTE:** Please contact your Toyota dealer for an appointment to add or delete REMOTE CONTROLS to your system. Additional REMOTE CONTROLS may be purchased in your Toyota dealer's parts department.

**To program (add) a REMOTE CONTROL to the system:**

- 1) Insert key into the ignition switch, and turn it to "ON".
- 2) Press and hold the ECU's PROGRAMMING SWITCH for 3 seconds.  
The STATUS MONITOR LED turns on for 5 seconds.  
**—YOU MUST PERFORM THE NEXT STEP WITHIN 5 SECONDS—**
- 3) Press and release a REMOTE CONTROL's top or bottom button.\*  
The STATUS MONITOR LED turns off.  
The PIEZO "CHIRPER" chirps once.  
The exterior lights flash once.
- 4) Turn off the ignition. The ECU will now operate with the REMOTE CONTROL just programmed.

**NOTE:** The factory preset operation is for the top button on both REMOTE CONTROLS to operate your system; the bottom button is not programmed to operate your system. To prevent accidental erasure of a REMOTE CONTROL code, we recommend that all REMOTE CONTROLS be programmed at the same time.



\* Either button on your REMOTE CONTROL can be programmed to operate the RS3000.

## PROGRAMMING AND ADJUSTMENTS

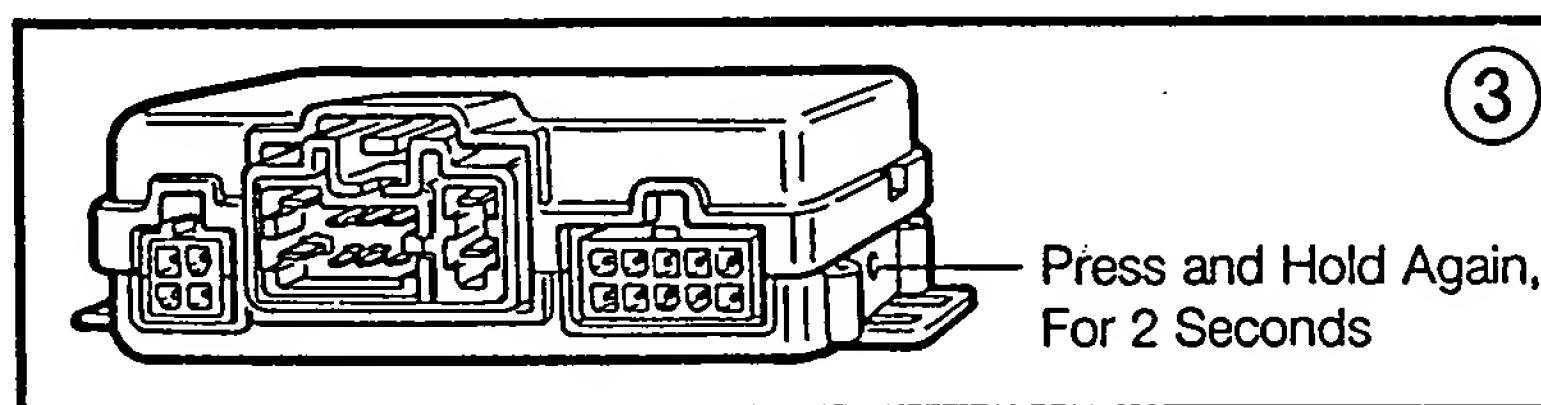
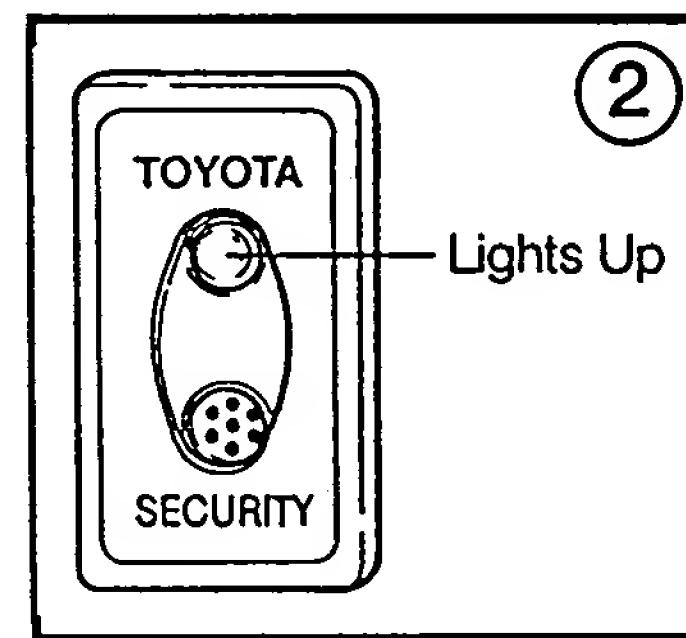
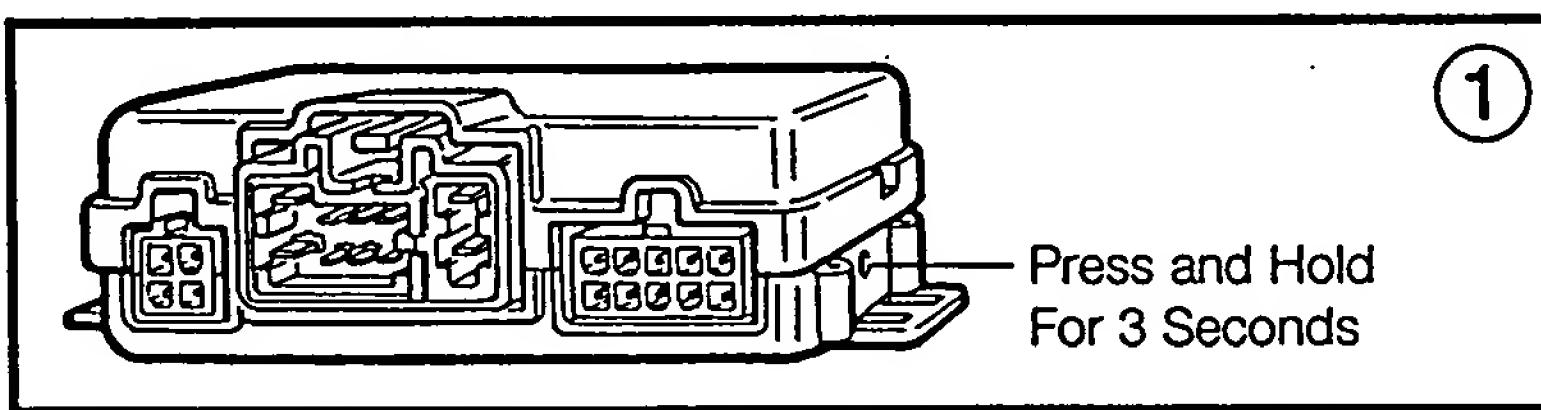
### REMOTE CONTROL PROGRAMMING

To erase all REMOTE CONTROL codes from the system:

- 1) Insert key into the ignition switch, and turn it to "ON".
- 2) Press and hold the ECU's PROGRAMMING SWITCH for 3 seconds.  
The STATUS MONITOR LED turns on for 5 seconds.

—YOU MUST PERFORM THE NEXT STEP WITHIN 5 SECONDS—

- 3) Press and hold the ECU's PROGRAMMING SWITCH for over 2 seconds again.  
The STATUS MONITOR LED turns off, then flashes 3 times  
The PIEZO "CHIRPER" chirps 3 times, and the exterior lights flash 3 times.
- 4) Turn off the ignition. The ECU has cleared all REMOTE CONTROL codes; until another REMOTE CONTROL is programmed, the system will not work with any REMOTE CONTROL.



6. Connect the harness connectors to the new SLCM in the same order as they were on the original module.
7. Insert the SLCM mounting studs through the holes in the support bracket and install nuts.
8. Reconnect battery and install trunk trim.

**PROGRAMMING THE HAND TRANSMITTER**

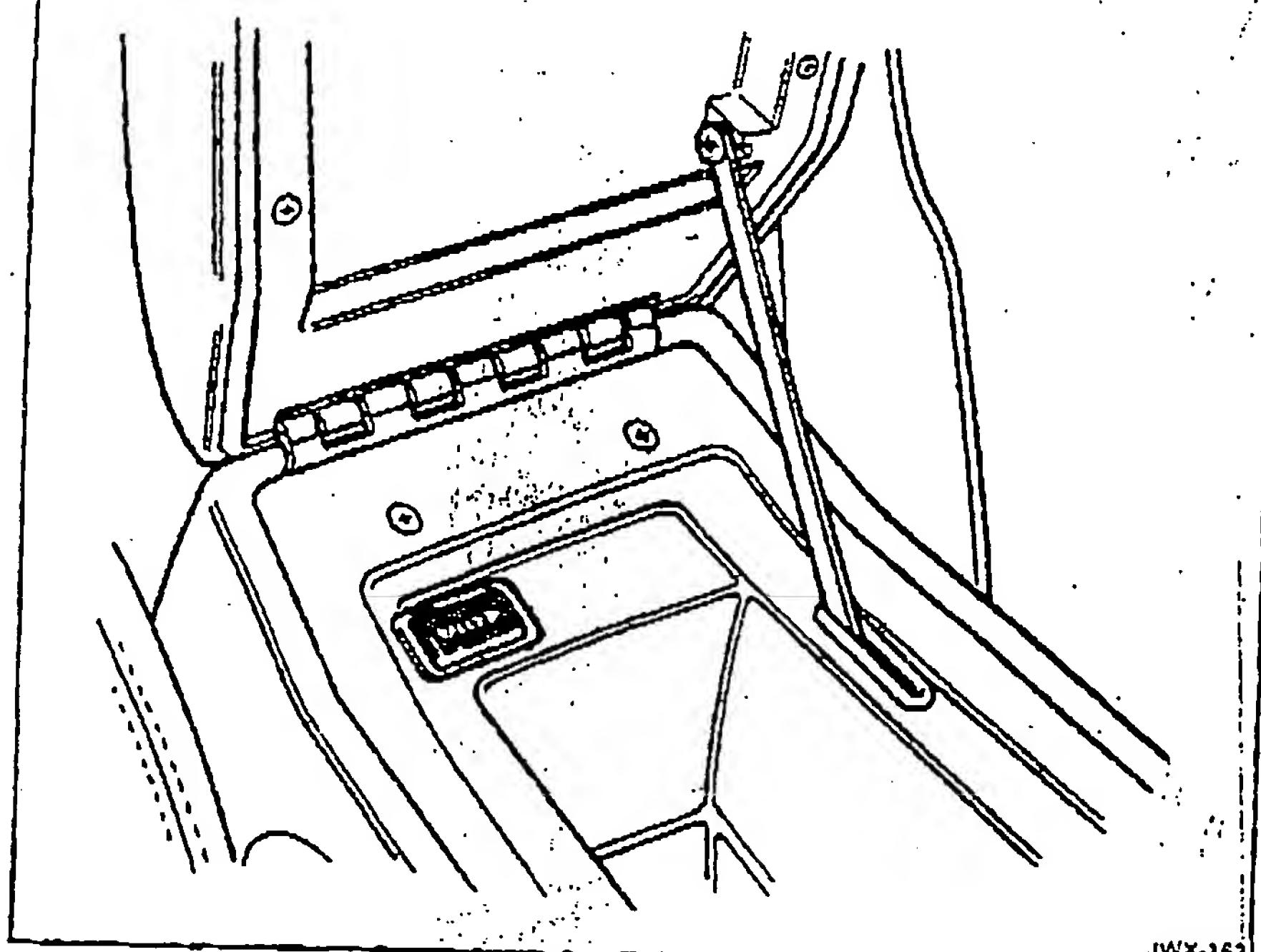
Use the PDU to reprogram the security system RF handset transmitters. The following method can be used to manually reprogram handset transmitters:

**NOTE:** All RF handset transmitters belonging to the vehicle being serviced must be available. If the learning process is carried out without having all the transmitters present, all previous transmitter codes will be overwritten, rendering the missing transmitters inoperable.

1. Open the trunk lid and driver's door.
2. Turn the ignition switch to the ON or II position.
3. Rock the valet switch located in the center console storage compartment (Illustration 2) 5 times. A single confirmation chirp and flash of the headlamps indicate that the security system has entered the learning mode.

**NOTE:** If difficulty is experienced entering the learning mode, check that the valet switch is functioning properly.

**VALET SWITCH**



**ILLUSTRATION 2**

4. Press the arm/lock (larger) button of the first transmitter. This transmitter will be linked to position 1 of the seat/column/mirror memory. A tone will confirm that the transmitter code was accepted. If no transmitter buttons are pushed, the SLCM will also time out after 15 seconds of inactivity, indicated by two chirps.
5. Rock the valet switch once. Two short chirps will signal that the system is prepared to accept the second transmitter.
6. Press the arm/lock button of the second transmitter. This transmitter will be linked to the position 2 of the seat/column/mirror memory. A tone will confirm that the transmitter code was accepted.
7. Rock the valet switch once. Three short chirps will signal that the system is prepared to accept the third transmitter.
8. Press the arm/lock button of the third transmitter. A tone will confirm that the transmitter code was accepted. This transmitter and any others will not be linked to a position in the seat/column/mirror memory.
9. The process of pressing the valet switch and waiting for the number of chirps equivalent to the transmitter number can be repeated for a fourth and fifth transmitter. The valet switch can be pressed to cycle through the unneeded transmitter programming sequences. The SLCM will also time out after 15 seconds of inactivity, indicated by two chirps. This will save the transmitter codes entered up to this point.
10. Turn the ignition switch off, remove the key, and close the doors and trunk lid.
11. Check for proper system operation including the recall of seat, steering wheel and mirror memory positions 1 and 2 from the handset transmitter.

## **WARRANTY INFORMATION:**

Service Action S635

<u>VEHICLE</u>	<u>SUMMARY CODE</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
Sedan Range 1995 MY VIN 727000 - 739235 Model codes 2310, 2311, • 2313, 2314, 2512	HA	Check, replace and reprogram new transmitters when performed at PDI or in conjunction with another repair (no drive in/out time)	0.15 hrs.
Sedan Range 1995 MY VIN 727000 - 739235 Model codes 2310, 2311, 2313, 2314, 2512	HB	Check, replace and reprogram new transmitters - only repair performed - with drive in/out time	0.30 hrs.

# Wireless Remote Entry EEPROM Programming

## Set-up

Key out of ignition and  
drivers door open and unlocked and  
passengers door closed and locked

## Procedure

1. Insert key in ignition and remove.
2. Press the ~~drivers~~ manual door lock switch, LOCK to UNLOCK, 5 times.
3. Close and open the drivers door.
4. Press the drivers manual door lock switch, LOCK to UNLOCK, 5 times.
5. Insert key in ignition and turn ignition ON and OFF...  
once to add a new code.  
twice to rewrite over all previously stored codes.  
three times to confirm how many codes are stored in the ECU.
6. Remove the key from the ignition.

The car will now respond back the selected mode by automatically locking and unlocking the doors...

once to add a new code.  
twice to rewrite over all previously stored codes.  
one to four times (slowly) to show how many codes have been stored.

If the confirm mode was selected the process is complete.

7. Press the transmitter switch on the key for 1 second.

After the signal is received the car will respond by automatically locking and unlocking the doors once.

NOTE: If the signal was not received, the car will not respond, begin again from step 1.

8. Close and open the drivers door.
9. Press the transmitter key switch for 1 second.

The car will now respond by automatically locking and unlocking the doors...

~~once to confirm the operation is complete.~~

twice to confirm that...

- a. the signal received does not match the stored code.
- b. the signal received has already been stored.

**THE PROCESS IS NOW COMPLETE.**

# SECTION 01-14B Door Lock Control System, Electronic

SUBJECT	PAGE	SUBJECT	PAGE
VEHICLE APPLICATION .....	01-14B-1	DIAGNOSIS AND TESTING (Cont'd.)	
DESCRIPTION AND OPERATION		Pinpoint Tests .....	01-14B-7
Battery Saver .....	01-14B-2	Symptom Chart .....	01-14B-7
Inputs and Outputs .....	01-14B-2	REMOVAL AND INSTALLATION	
System Wiring .....	01-14B-2	Antenna .....	01-14B-18
Transmitter .....	01-14B-1	Remote Entry Receiver Module .....	01-14B-18
Transmitter Programming .....	01-14B-2	Transmitter Battery .....	01-14B-19
DIAGNOSIS AND TESTING		SPECIAL SERVICE TOOLS/EQUIPMENT .....	01-14B-19
Electrical Schematics .....	01-14B-3	PARTS CROSS-REFERENCE .....	01-14B-19
Inspection and Verification .....	01-14B-6		

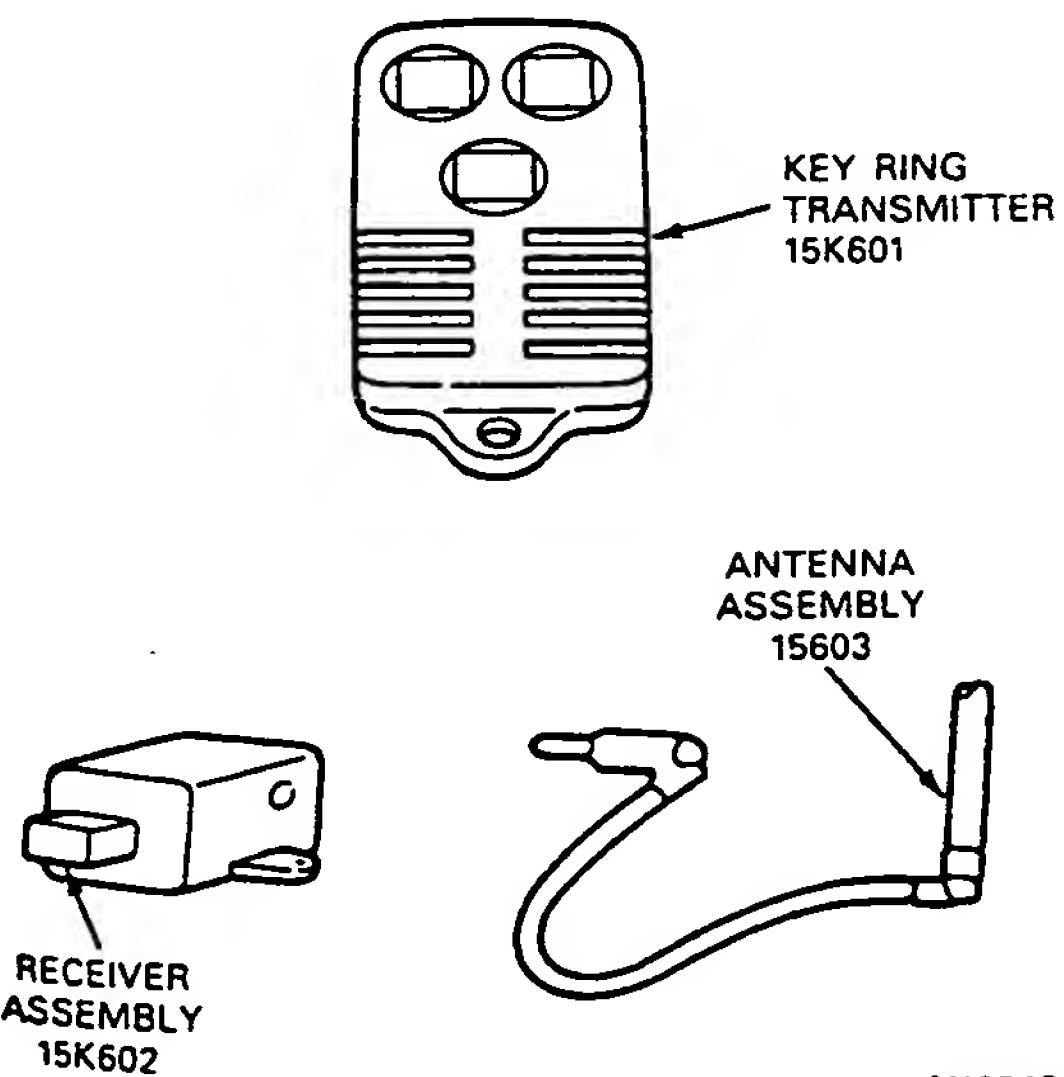
## VEHICLE APPLICATION

Explorer Limited

## DESCRIPTION AND OPERATION

### Transmitter

The remote entry system has three main components: The remote entry receiver module, located behind the quarter trim panel (31012), the antenna and the three button (hand-held) transmitter. The transmitter is re-programmable. All transmitters for the vehicle should be set at the same time. One transmitter is essential for troubleshooting the system.



The remote entry receiver module performs the following functions:

- Unlocks driver's front door (20124).
- Unlocks all front door, front rear door (24630) and liftgate (40010), if equipped.
- Unlocks luggage compartment.
- Locks all front doors, rear doors and liftgate, if equipped.
- Arms and disarms the anti-theft system, if equipped.
- Turns on interior lamps (13776) and keyhole illumination when using the transmitter.
- Activates and deactivates security feature which sounds horn (13832) and flashes parking lamps (13201).
- Activates battery saver feature which removes power from interior lamps 45 minutes after last input to remote entry receiver module.

## DESCRIPTION AND OPERATION (Continued)

## Inputs and Outputs

The remote entry system receives inputs from the following:

- Ignition switch (11572)
- Door lock switch (14028)
- Courtesy lamp switch (13713)
- Door open warning lamp switch (14018)
- Program connector
- Transmitter(s)

The system distributes output to the following:

- Interior lamps
- Power door lock actuator (218A42)
- Keyhole illumination
- Horn relay and bracket (13853)
- Auto lamp relay (parking lamps)
- Anti-theft module (if equipped)

## System Wiring

Typical system wiring is shown in the following illustration. Refer to Section 18-01 for individual wiring harness installations.

## Battery Saver

The remote entry receiver module includes a battery saver relay which supplies power to the interior lamps Circuit 705 and Circuit 53 when active. When the battery saver relay deactivates, power is removed from these interior lamps.

The battery saver relay is activated anytime the remote entry receiver module receives an input signal. This relay deactivates 45 minutes after the last input to the remote entry receiver module.

NOTE: The battery saver relay does NOT control power to the headlamp bulbs (13007).

## Transmitter Programming

NOTE: The remote entry features will not function when the ignition switch is in the RUN or ACCESSORY position.

To unlock the driver's door, press the UNLOCK button on the transmitter (which is programmed into the remote entry receiver module) once. This will also disarm the anti-theft system, if equipped.

To unlock all doors and liftgate, press the UNLOCK button on the transmitter twice, the second depression must be within five seconds of the first UNLOCK depression.

If more than five seconds have elapsed since the first depression of the UNLOCK button, pressing the UNLOCK button again will only unlock the driver's door.

To turn on interior lamps and keyhole illumination, press either UNLOCK or PANIC.

To lock all doors, press LOCK button on the transmitter once. This will also arm the anti-theft system, if equipped.

To confirm that doors have locked, press LOCK button again, within five seconds of the first depression. This will beep the horn and lock all doors again.

To activate the personal security alarm, press the red PANIC button. The horn will beep and parking lamps will flash for a maximum of three minutes.

To deactivate the personal security alarm, press the red PANIC button again or turn the ignition switch ON.

NOTE: The remote entry receiver module erases all previous transmitters from memory when the transmitters are programmed or re-programmed. The remote entry receiver module can store up to four transmitters in memory.

To program (or re-program) transmitter(s) into the remote entry receiver module, perform the following steps:

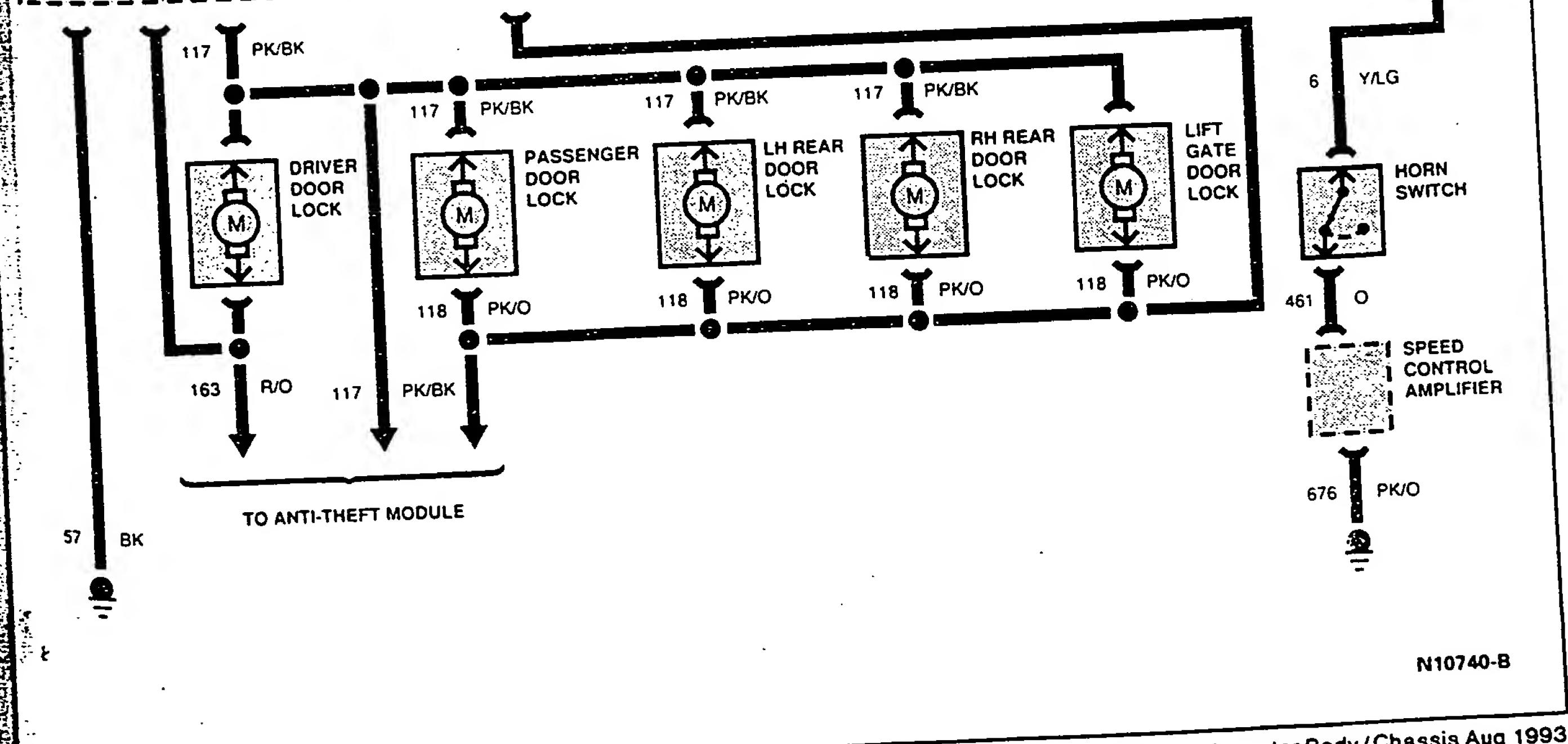
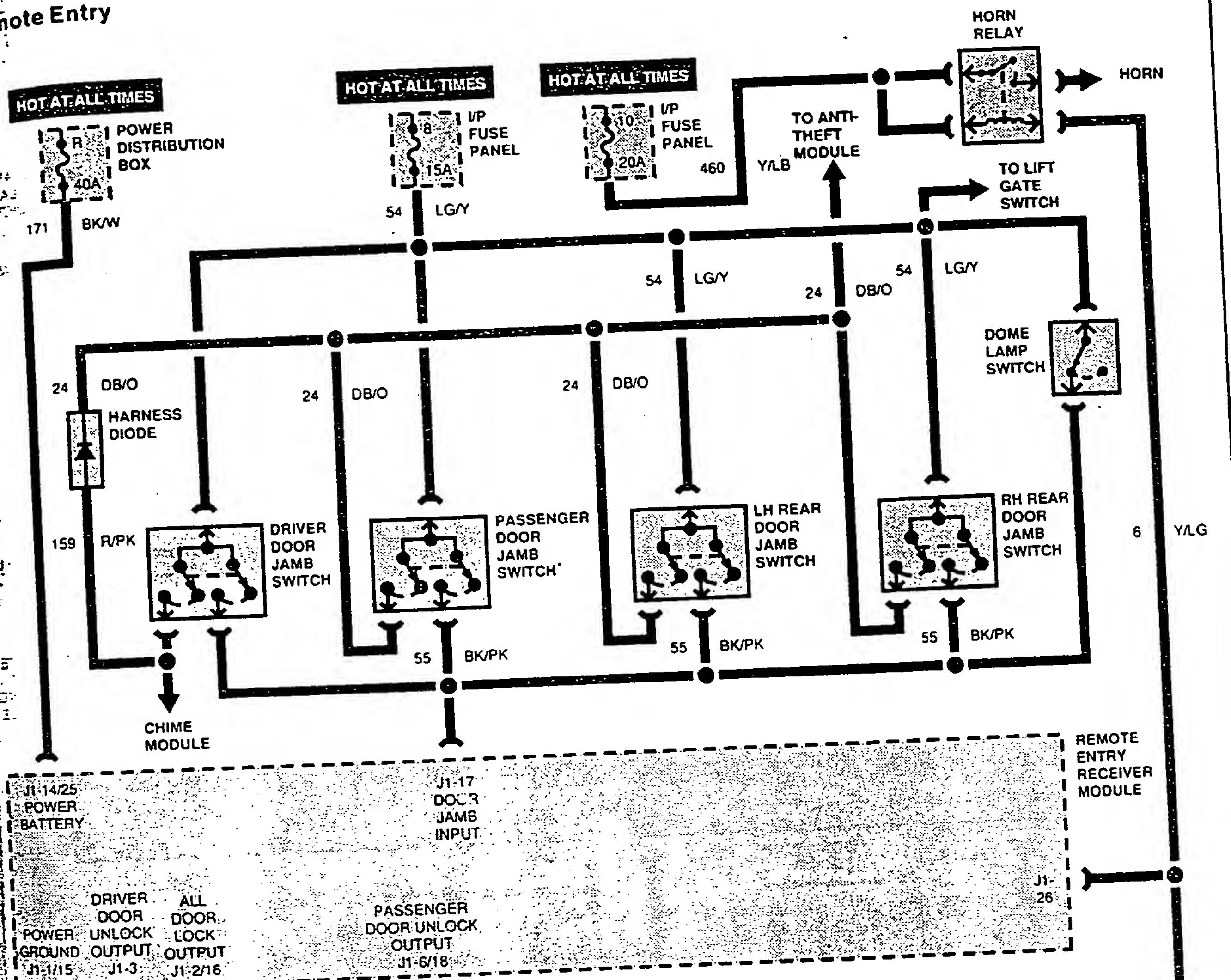
1. Turn ignition switch to ON or ON / ACCESSORY position and momentarily short the two terminals of the Program Connector (J4) (a two-pin connector taped to the wire assembly and accessed by removing the LH quarter access panel). All doors should lock then unlock. Remove shorting pin.
2. Press any button on transmitter. All doors should lock then unlock to verify the transmitter has been programmed. If door locks do not respond, press button again (up to three times maximum with the same transmitter). If door locks still fail to respond, go to Pinpoint Test F.
3. Repeat Step 2 to program additional transmitters into the remote entry receiver module (up to four transmitters maximum).
4. Turn ignition switch off. All doors should lock then unlock.
5. Check operation.

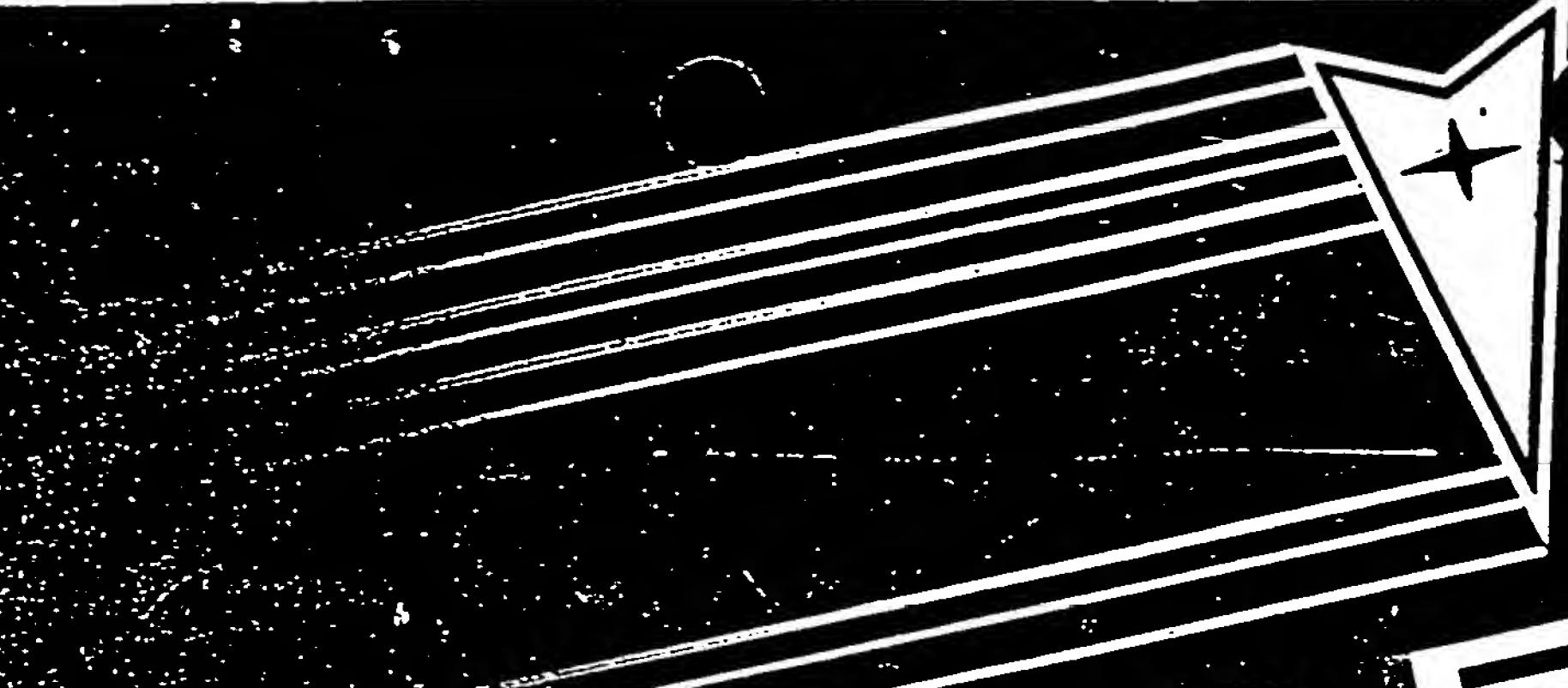
4B-3

## **DIAGNOSIS AND TESTING**

## Electrical Schematics

## Remote Entry





GRAND PRIX  
GRAND PRIX  
GRAND PRIX  
GRAND PRIX  
GRAND PRIX

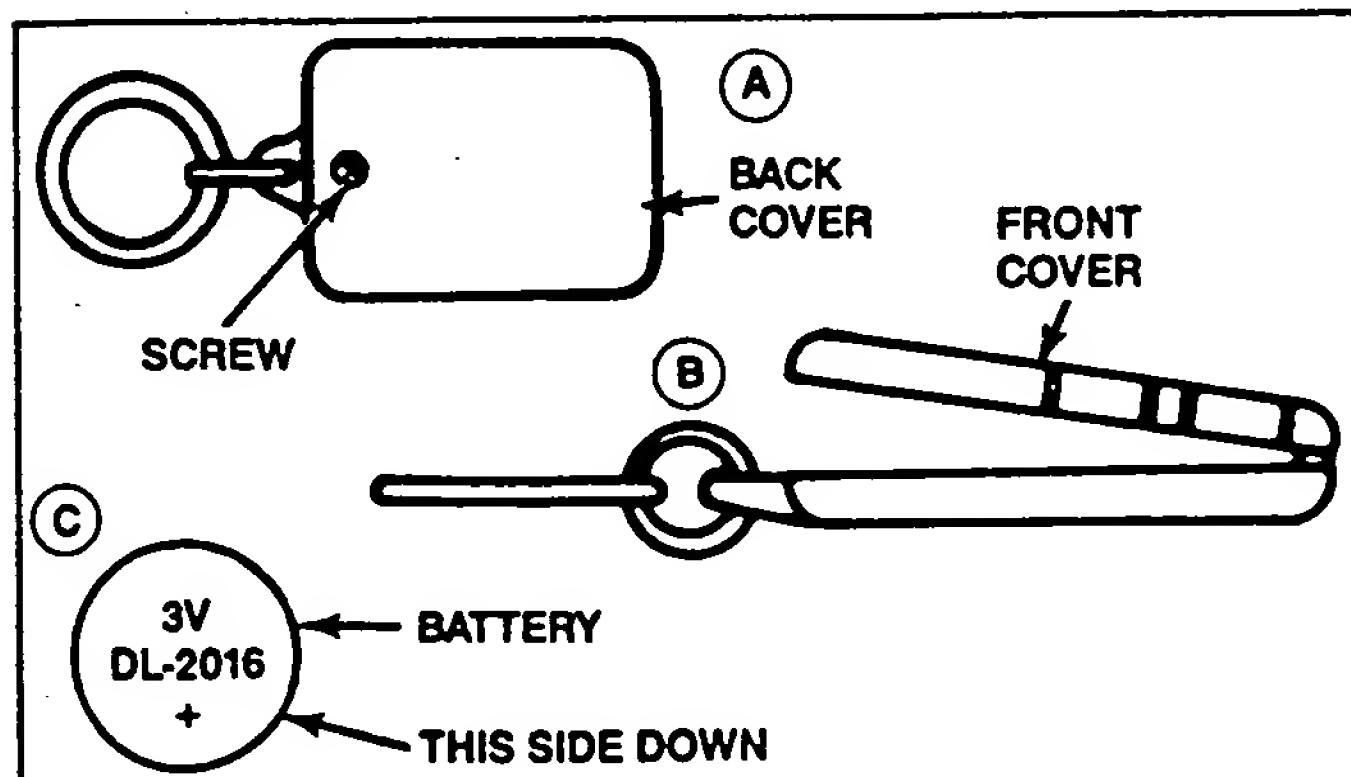
**1989 PONTIAC OWNERS MANUAL**

Keep with car at all times. Contains important operating, safety and maintenance instructions.

**Battery Replacement**

Transmitter batteries should last two years in normal use. Replace the batteries when transmitter range decreases. Use Duracell type DL-2016 or equivalent. To replace transmitter batteries:

1. Remove the screw (A) from the back cover.
2. Open the front cover (B) at the key ring side.
3. Remove and replace the batteries (C).



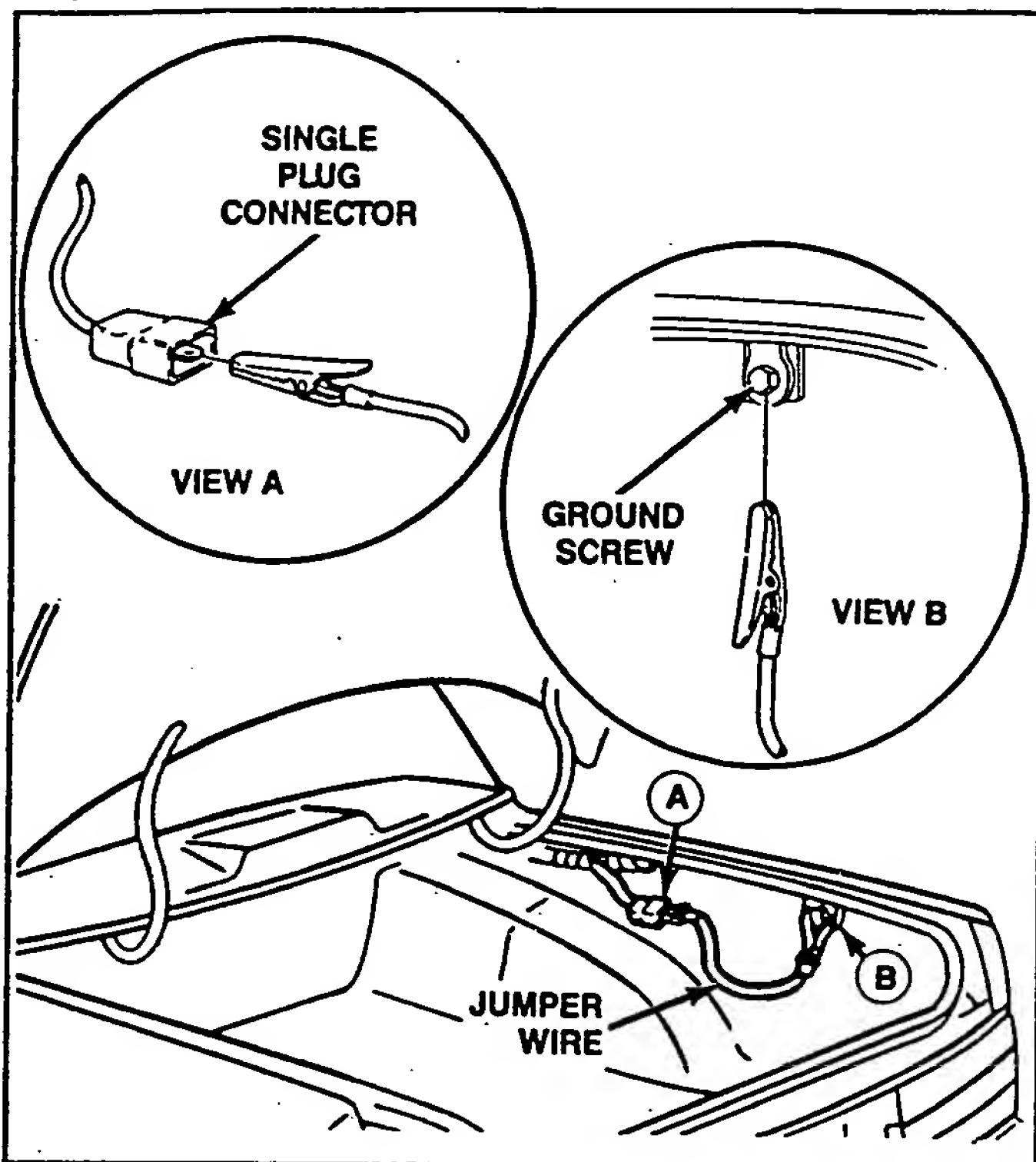
(Note: Replacing transmitter batteries does not require matching the transmitter to the car again.)

**Matching Transmitter(s) to Car**

To match new or additional transmitter(s) to a car, do the following:

1. Have both transmitters that will be matched to the car present, even if only one is new. Remove the car keys from the ignition and have them in your possession.
2. Open the trunk and pull back the trunk side carpet on the passenger side. Locate a single plug connector hanging from the wire harness. This is the "Program" connector.
3. Use a jumper wire with alligator clips at both ends to "ground" the program connector to the antenna ground screw. Grounding the program terminal erases the system memory and causes the doors to lock and unlock once. This means the system is ready to be matched to new or different transmitters.
4. Keeping the program terminal grounded, press any button on the first transmitter. Regardless of which button was pushed, the door locks will lock and unlock again to indicate the transmitter is now matched. If there is no response, check the transmitter batteries. NOTE: If you do not want to match a second transmitter, proceed to step 6.
5. Still keeping the program terminal grounded, repeat Step 4 with the second transmitter. If you disconnect the ground wire before completing this step, or if you press the button

4. Assemble the transmitter in reverse order.
5. Check transmitter operation. If the lock control does not work as it should, see your Pontiac dealer.



on the first transmitter more than once, only the first transmitter is matched. If you make a mistake, disconnect the jumper wire and start over at Step 3.

6. Remove the jumper wire. (Note: The system will not operate if the jumper wire is still connected.)
7. Test operation of both transmitters with the car.

If the lock control does not work as it should, see your Pontiac dealer.

#### DECK LID CARRIER

The optional deck lid luggage carrier is designed to allow loading of items onto the deck lid of your car. The carrier does not increase the total load-carrying capacity of the car, shown opposite "Max Load" on the Tire Placard on the driver's door. Be sure the total weight of the cargo on the deck lid, plus the weight of the cargo and passengers inside the car, plus the tongue load of any trailer you are towing, does not exceed this "Max Load" vehicle capacity weight. See "Tires" in Section 5 for more information on Vehicle Loading. If needed, see "Trailer Towing" in Section 2.

**NOTICE:** To help avoid damage to the car, do not exceed 23 kilograms (50 pounds) cargo weight on the deck lid. Position the cargo on the luggage carrier

(Continued)

- Doors can also be locked from outside by using the door lock key.

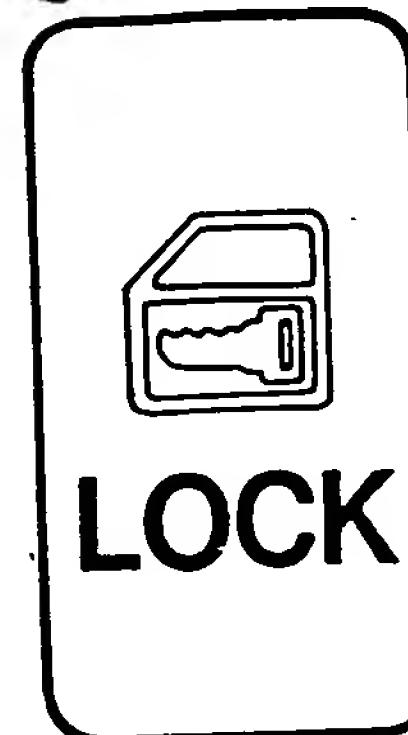
All models have a standard safety feature overriding door locks. When the doors are locked, both the inside and outside door latch mechanisms are inoperative, thus preventing inadvertent opening of the door by movement of the inside handle.

#### Always Lock The Doors

**CAUTION:** To help reduce the risk of personal injury in an accident, always lock the doors when driving. Along with using the safety belts properly, locking the doors helps prevent people from being thrown from the vehicle. It also helps prevent unintended opening of the doors and helps keep out intruders.

#### Power Door Locks (Optional)

Both doors may be locked or unlocked by operating the switch marked "LOCK," located on the door trim pad on cars equipped with power door locks. The electric locking mechanism does not at any time interfere with manual operation of any door lock lever. The doors will not unlock or open with the inside door handle when the power door lock switch has been actuated, but can be unlocked individually by sliding the lock lever. If the headlamps have been on, the driver's door lock switch will remain illuminated for a short time after the headlamps have been turned off. This helps locate the lock button when dark.

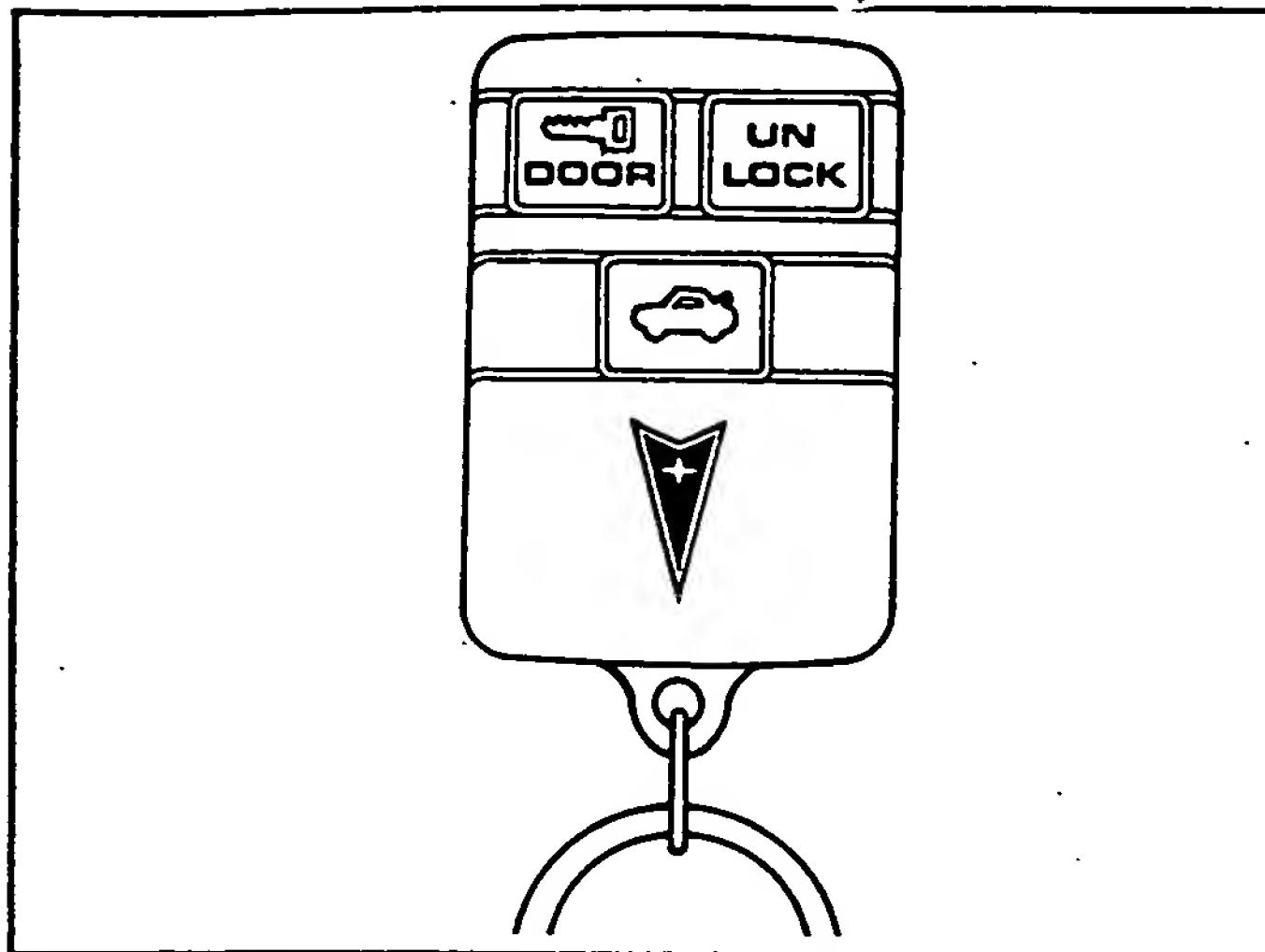


#### Remote Lock Control (Optional)

A key chain transmitter operates both door and trunk locks at a distance of up to 33 feet (10 meters). Actual distance will depend upon proximity to other cars and building structures. One transmitter comes with the car, but each car may be set to respond to as many as two transmitters. Additional transmitters are available from your Pontiac dealer. Instructions for matching the transmitter to the car are in section 2D.

- To unlock doors:

- Press and release "UNLOCK" once to unlock the driver's door only.
- Press and release "UNLOCK" a second time (within 1 to 5 seconds) to unlock the remaining doors.



- To lock doors:

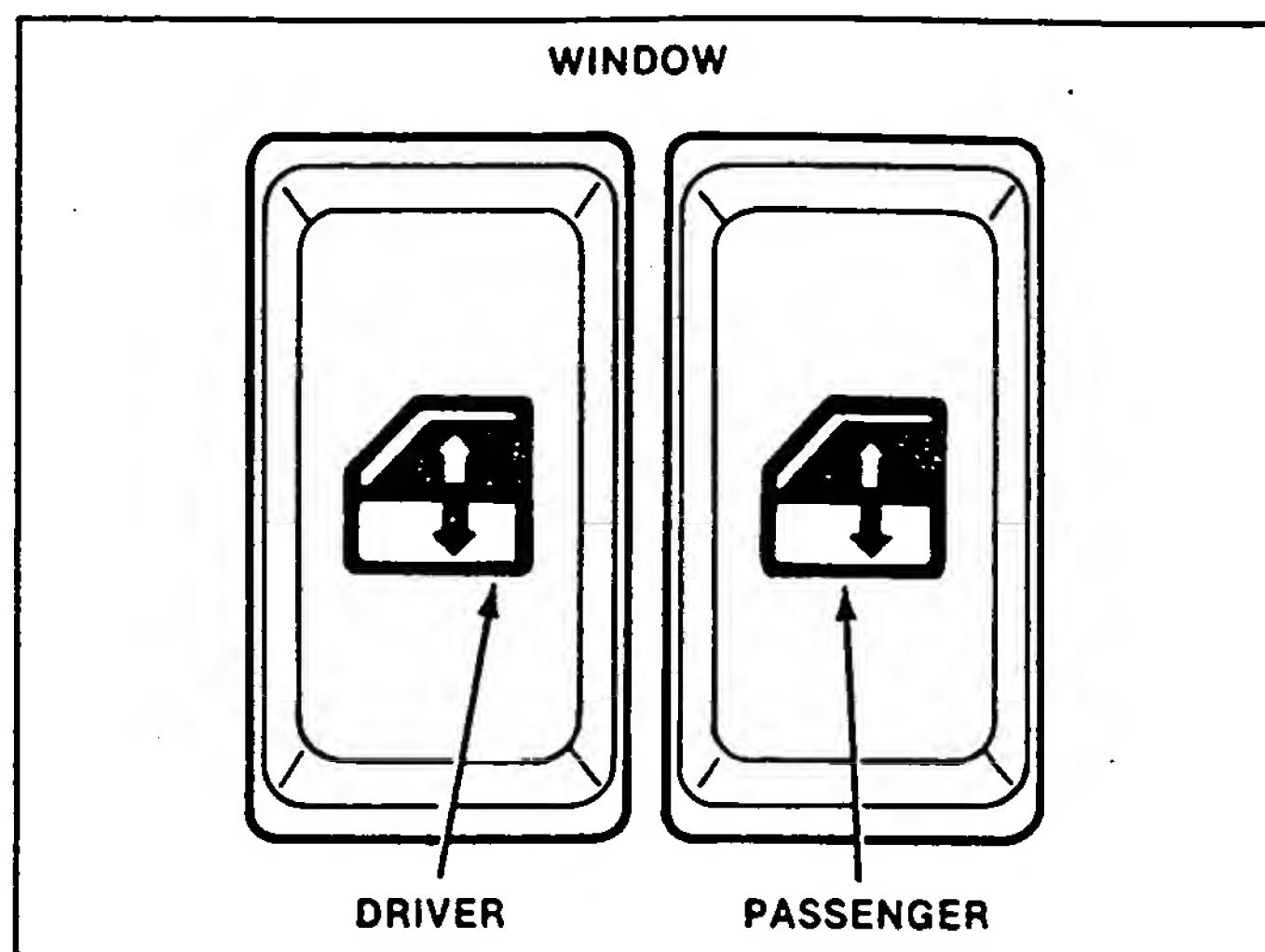
- Press and release "(KEY SYMBOL) DOOR" to lock all the doors.

- To release trunk lid:

- Press and release "(TRUNK OPEN SYMBOL)" to open trunk.

A key chain transmitter may be used with more than one car, but a transmitter will not open any car to which it has not been

matched. Each transmitter has a preset code that cannot be changed. This is to prevent a stranger from opening your car. (Note: If you have matched your transmitter to more than one car, care should be taken when the cars are parked near each other.) See Section 2D for additional information. For vehicles with automatic transmissions, the shift selector must be in "PARK" or "NEUTRAL" for the trunk release to function.



★ 1994

OWNER'S  
GUIDE  
JEEP  
GRAND  
CHEROKEE

Jeep

Jeep Grand Cherokee

■ Before Starting

■ Starting and Operating

■ In Case Of Emergency

■ Maintenance

■ Customer Assistance

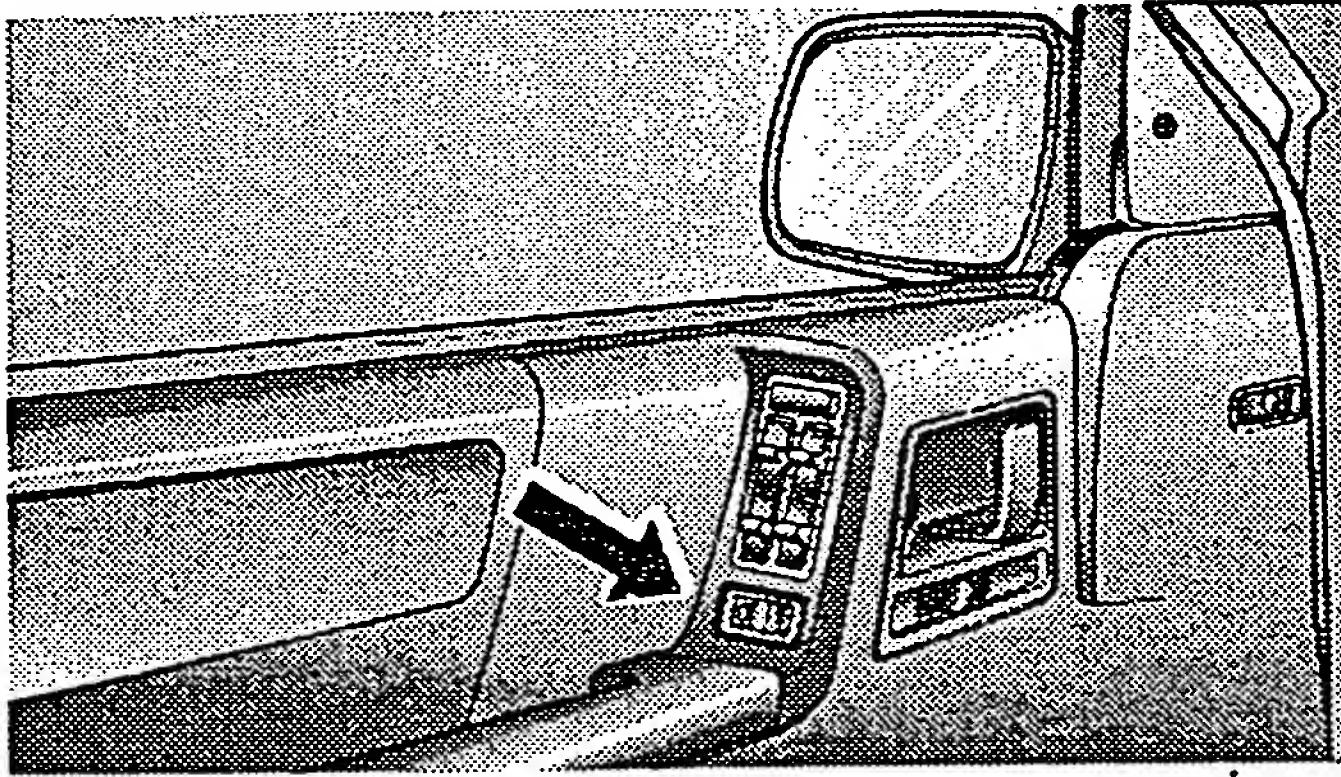
■ Detailed Index

## BEFORE STARTING YOUR VEHICLE

### Power Door Lock System

The power door locks are on a rocker-type switch. Depress the right side of the switch to Lock and the left side of the switch to Unlock. The driver's switch unlocks all doors including the liftgate.

As a safety feature the doors will not lock (using the power lock switch or keyless entry system) in either of these conditions:



- 1) The driver's door is open while the key is in the ignition;
- 2) The driver's door is open while the headlights switch is On.

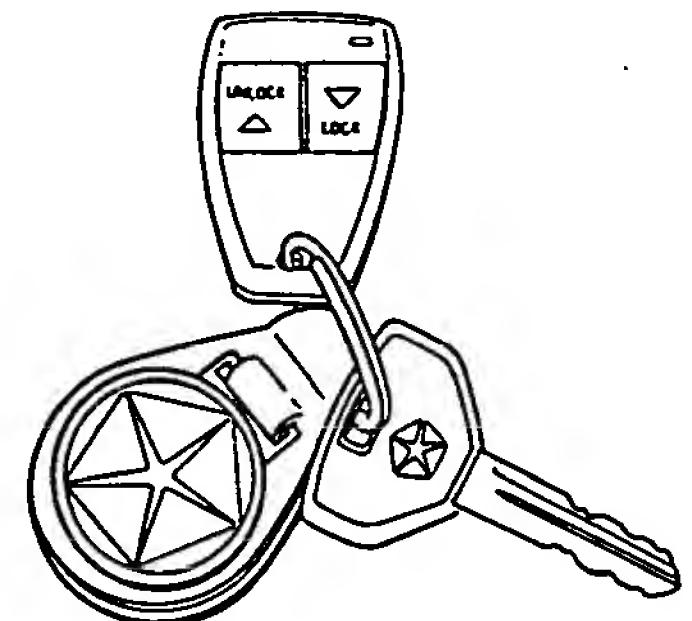
Once locked, the rear doors cannot be opened from the inside until the lock lever has been released. However, both the front doors can be opened using the inside door handle.

### KEYLESS ENTRY

#### SYSTEM—Optional

The Keyless Entry System enables you to lock or unlock all the doors from a position outside the vehicle.

Operate the system by holding the keyring transmitter close to either side of the vehicle and pointing it at the receiver. The receiver is in the Dome Lamp



## BEFORE STARTING YOUR VEHICLE

assembly or in the middle of the overhead console. Press the finger pad "Lock" or "Unlock" buttons to activate.

The indicator light glows when the unit is operating to show that the transmitter batteries are OK. Battery life is approximately one year. Replace the batteries in the transmitter with two CR1616 3-volt batteries. Batteries must be installed correctly. The polarity, "+" or "-", is engraved on the case.

**NOTE:** The transmitter can be damaged if struck sharply. Do not drop or throw keys with transmitter attached.

The Keyless Entry transmitter is programmable. Use this procedure:

- Sit inside the vehicle and close all the doors.
- Place ignition in the OFF position.
- Open the driver's door and leave open during programming procedure.

- Move the mechanical door lock lever to the LOCK position.
- Turn ignition to the RUN position.
- Aim the transmitter at the Keyless Entry receiver in the overhead console or in the dome light assembly and press the Lock button.
- Hold the button until the light on the transmitter blinks twice. The door locks will cycle.
- Turn ignition OFF within 20 seconds.
- Check receiver memory by cycling the door locks using the transmitter.

Up to four transmitters may be programmed into a vehicle.

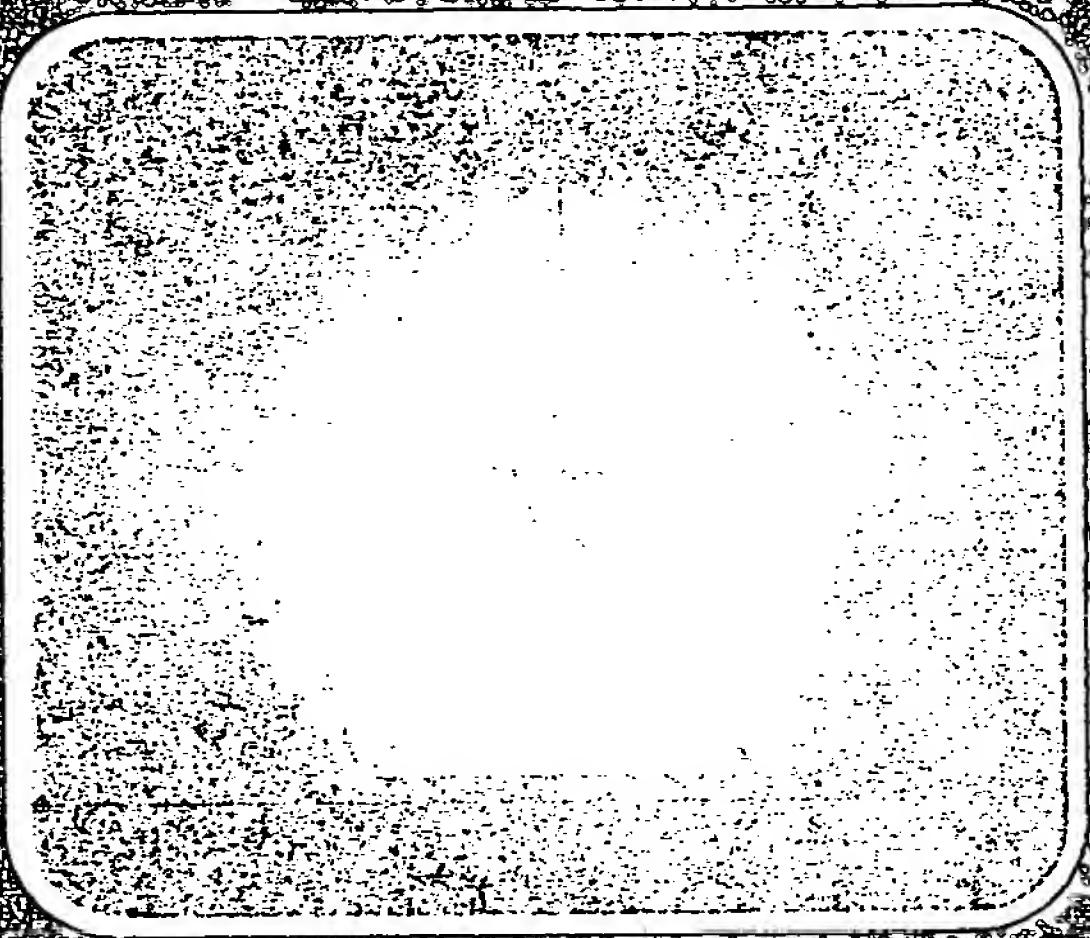
## ILLUMINATED ENTRY

All interior lamps will illuminate the vehicle when the doors are unlocked using the Keyless Entry transmitter or when a door is opened. These lamps will stay on for about 30 seconds or until the engine is started.

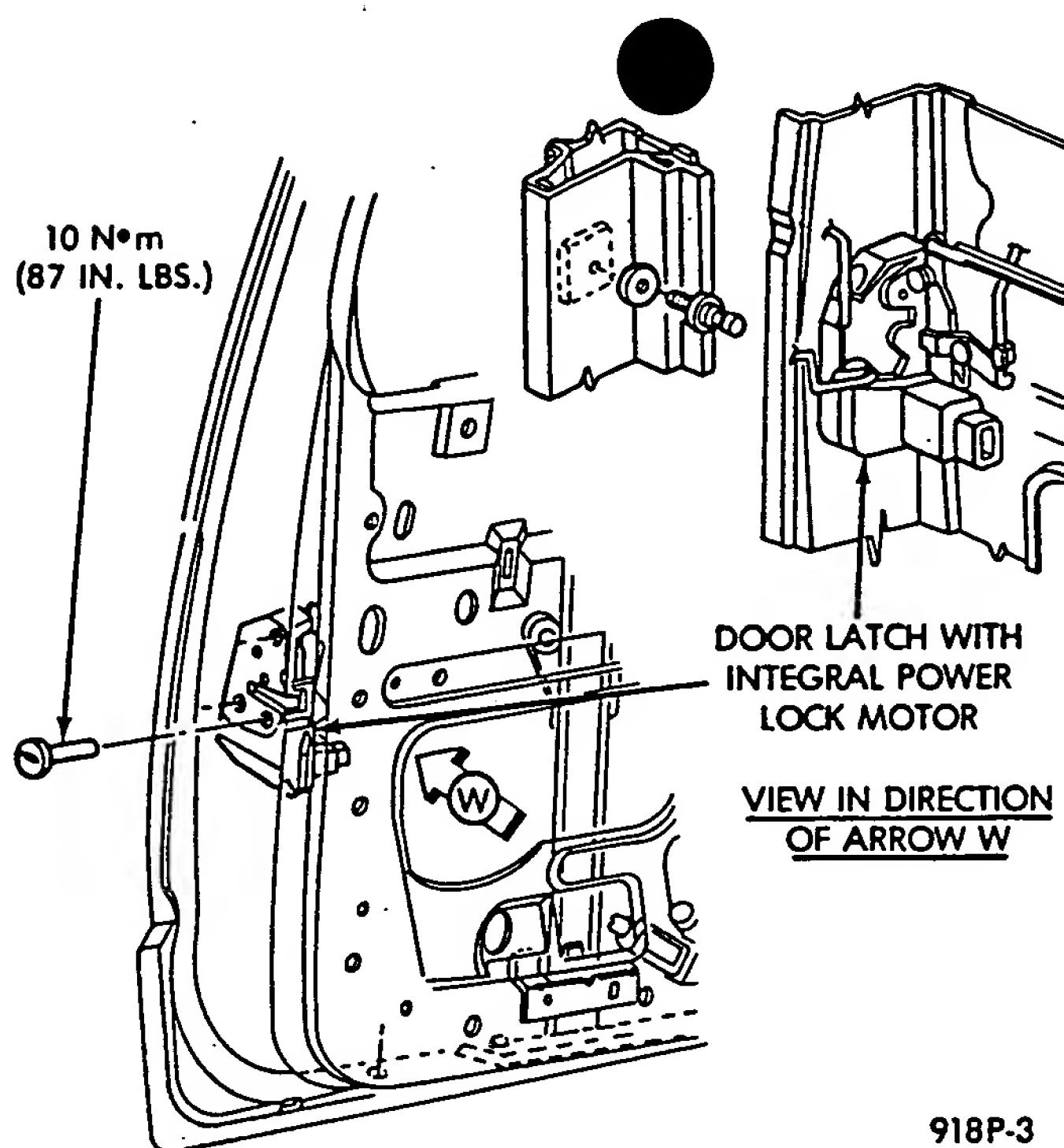
1995

# SERVICE MANUAL

## TOWN & COUNTRY, CARAVAN, AND VOYAGER



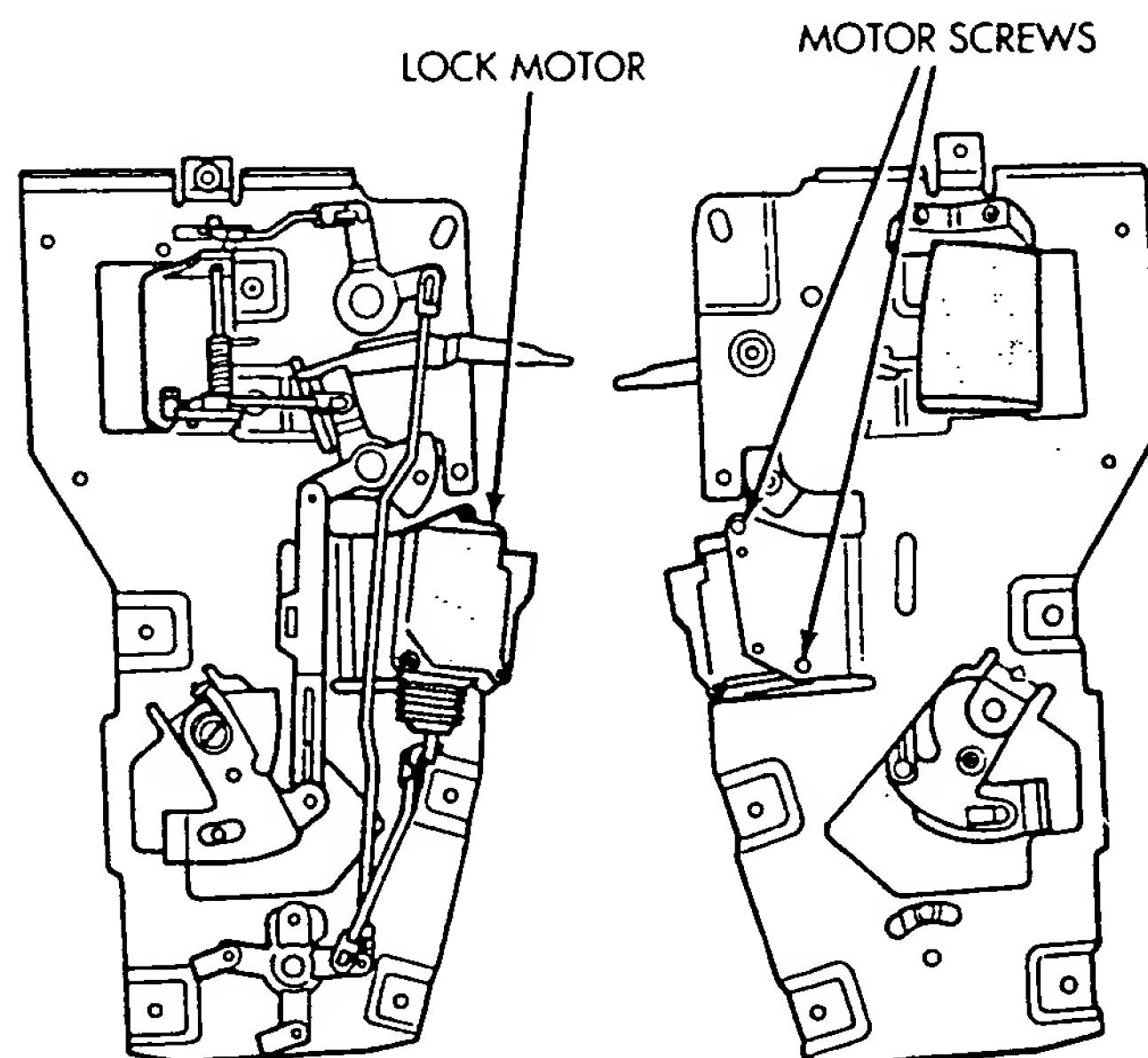
FRONT WHEEL DRIVE  
ALL WHEEL DRIVE



918P-3

Fig. 5 Front Door Assembly

- (2) Remove plastic button, in upper right corner of door trim panel. Remove screw behind button and a second screw down towards the right middle of panel.
- (3) Remove three plastic retainers along bottom edge of panel.
- (4) Using a trim stick, start at top left side of panel and disengage trim clips.
- (5) Remove complete door trim panel.
- (6) Remove latch control assembly mounting bolts (Fig. 6).



948P-4

Fig. 6 Latch Control Assembly

(7) To remove assembly, slide assembly to the right, pull outward slightly and let it hang towards the inside of vehicle.

- (8) Remove motor link at locking lever.
- (9) Disconnect motor power connector.
- (10) Remove motor mounting screws and motor from door.
- (11) For installation reverse above procedures.

## RELEASE SOLENOID REPLACEMENT LIFTGATE DOOR

- (1) Remove liftgate trim panel
- (2) Remove solenoid link at locking lever.
- (3) Disconnect solenoid power connector. 9
- (4) Remove solenoid mounting screws and motor from door.

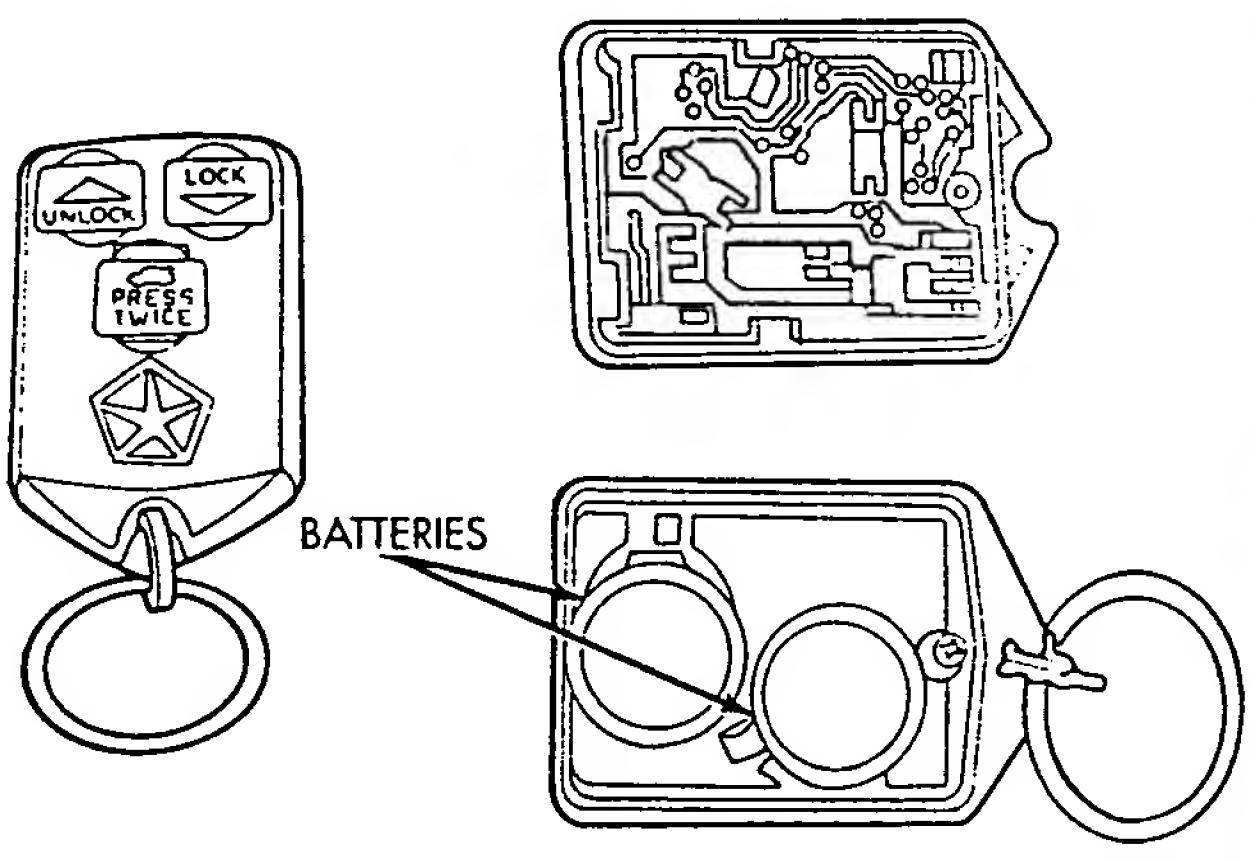
## INSTALLATION

- (1) Install solenoid and tighten screws to 3 N·m (25 in. lbs.) torque.
- (2) Connect solenoid link to locking lever and connect solenoid power connector.
- (3) Install door trim panel.

## REMOTE KEYLESS ENTRY

### OPERATION

The transmitter has three buttons for operation (Fig. 7).



958Q-3

Fig. 7 Transmitter

- UNLOCK driver's door, enable illuminated entry. Pushing and releasing the button once will unlock the driver's door. Two times within five seconds all doors will unlock.
- LOCK all doors and chirp horn. The chirp of horn verifies the lock signal was received.
- Unlock Liftgate by pressing and releasing the button two times within five seconds.
- The receiver is capable of retaining the transmitters in memory even when power is removed.

- Each receiver must have at least one and no more than two transmitters.

### CONTROL RANGE

Operation range is within 7 meters (23 ft.) of the receiver.

### TRANSMITTER BATTERY

The battery can be removed without special tools and are readily available at local retail stores. The recommended battery is Duracell DL 2016 or equivalent. Battery life is about one to two years.

### PROGRAM REMOTE KEYLESS ENTRY

- (1) Open and lower glove box door.
- (2) Locate program line a dark green wire with a molded insulator on the end. Located behind and lower end of the glove box.
- (3) Turn ignition switch to the ON position.
- (4) Connect the program line from the Remote Keyless Entry Module to ground. The door locks will lock and unlock to indicate the receiver is ready to receive transmitter code. Liftgate solenoid will not cycle.
- (5) Press any button on the transmitter to set code. If there is a second transmitter it has to be set at this time. The locks will cycle to confirm programming.
- (6) Disconnect the program line from ground. This returns the system to its normal operation mode.
- (7) Install glove box to original position

### HORN CHIRP CANCELLATION

During the programming operation the horn chirp can be disabled using the following procedures:

- (1) Open and lower glove box door.
- (2) Locate program line a dark green wire with a molded insulator on the end. Located behind and lower end of the glove box.
- (3) Turn ignition switch to the ON position.
- (4) Connect the program line from the Remote Keyless Entry Module to ground. The door locks will lock and unlock to indicate the receiver is ready to receive transmitter code. Liftgate solenoid will not cycle.
- (5) Press any button on the transmitter to set code. If there is a second transmitter it has to be set at this time. The locks will cycle to confirm programming.
- (6) Press LOCK then UNLOCK transmitter buttons repeat three times.
- (7) Door locks and rear release will cycle three times as feedback of Horn Chirp lockout.
- (8) Remove ground from program line to restore normal system operation.
- (9) To reinstate the Horn Chirp feature refer to Program Remote Keyless Entry.

### TESTING

**CONDITION:** When trying to program the receiver module in the vehicle with a new transmitter and there is no response from the module. Example: the door locks do not cycle through a lock/unlock routine. Refer to Fig. 8 for a block wiring diagram or to Group 8W, Wiring Diagrams.

(1) Be sure that the module has a battery feed from the 15 amp fuse in cavity 1 of the black connector. Also affected would be:

- Interior lights
- Power mirrors
- Radio memory
- Body control module

(2) Be sure that the module has an ignition feed from 10 Amp fuse in cavity 7 of the blue connector. Also affected would be the body computer, instrument cluster and message center.

(3) Be sure that the module has a ground to the cavity 5 of the black connector.

(4) Be sure that you are supplying a good ground to the programming wire.

(5) If the above circuits are good, replace the Receiver Module.

**CONDITION:** Doors can be locked or unlocked with the Keyless Entry transmitter. But the doors will not lock from the switch.

Check the connection from door lock switch to RKE module.

**CONDITION:** All doors except driver's door will lock with the transmitter.

(1) Test the driver's door output of the Receiver Module for a battery voltage.

(2) If there is no voltage at the pin, replace the Receiver module.

(3) If there is a battery voltage at the output, check the motor for battery voltage. If voltage OK, replace the door lock motor. If not OK, repair as necessary.

**CONDITION:** Only driver's door will lock with the transmitter.

• Repair ground circuit to unlock relay or the circuit from the motors to the relay.

• Replace unlock relay

**CONDITION:** Doors do not lock with transmitter but lock using switch and still has horn CHIRP indicating they did lock.

Check circuit from remote keyless entry module to the body control module. Check for proper connection and that terminals are fully seated. If circuits are OK replace receiver module.

**CONDITION:** Doors will lock with the transmitter but there is no horn CHIRP.

(1) Press horn button, listen horn sound.

(2) If the horn sounded, check continuity between horn relay and RKE module. If no horn, check the horn relay operation and wiring to horns.

# 1994 ACCESSORIES & EQUIPMENT

## Remote Keyless Entry System – “N” Body

**“N” Body: Achieva, Grand Am, Skylark**

### DESCRIPTION & OPERATION

Remote keyless entry system allows driver to unlock driver's door, unlock all doors, lock all doors, or release trunk lid by using a hand held transmitter. Maximum transmitter range is approximately 23 ft. If transmitter range becomes less than 23 ft., batteries in transmitter may need replacement. Keyless entry system also incorporates illuminated entry system.

### PROGRAMMING PROCEDURE

1) Keyless entry modules (receivers) can be programmed to receive 2 Vehicle Access Codes (VAC). Two transmitters may be used to operate remote control lock system. In addition, several vehicles, each with keyless entry, may be programmed to operate from same transmitter or 2 different transmitters.

2) During programming of keyless entry module receiver, feedback is provided by receiver by cycling door locks. To program a keyless entry module receiver to match the VAC of 1-2 transmitters, use a jumper wire and jumper 2 terminals of keyless entry module program connector. Program connector is located in front of left rear inner wheel panel, inside trunk. See Fig. 1.

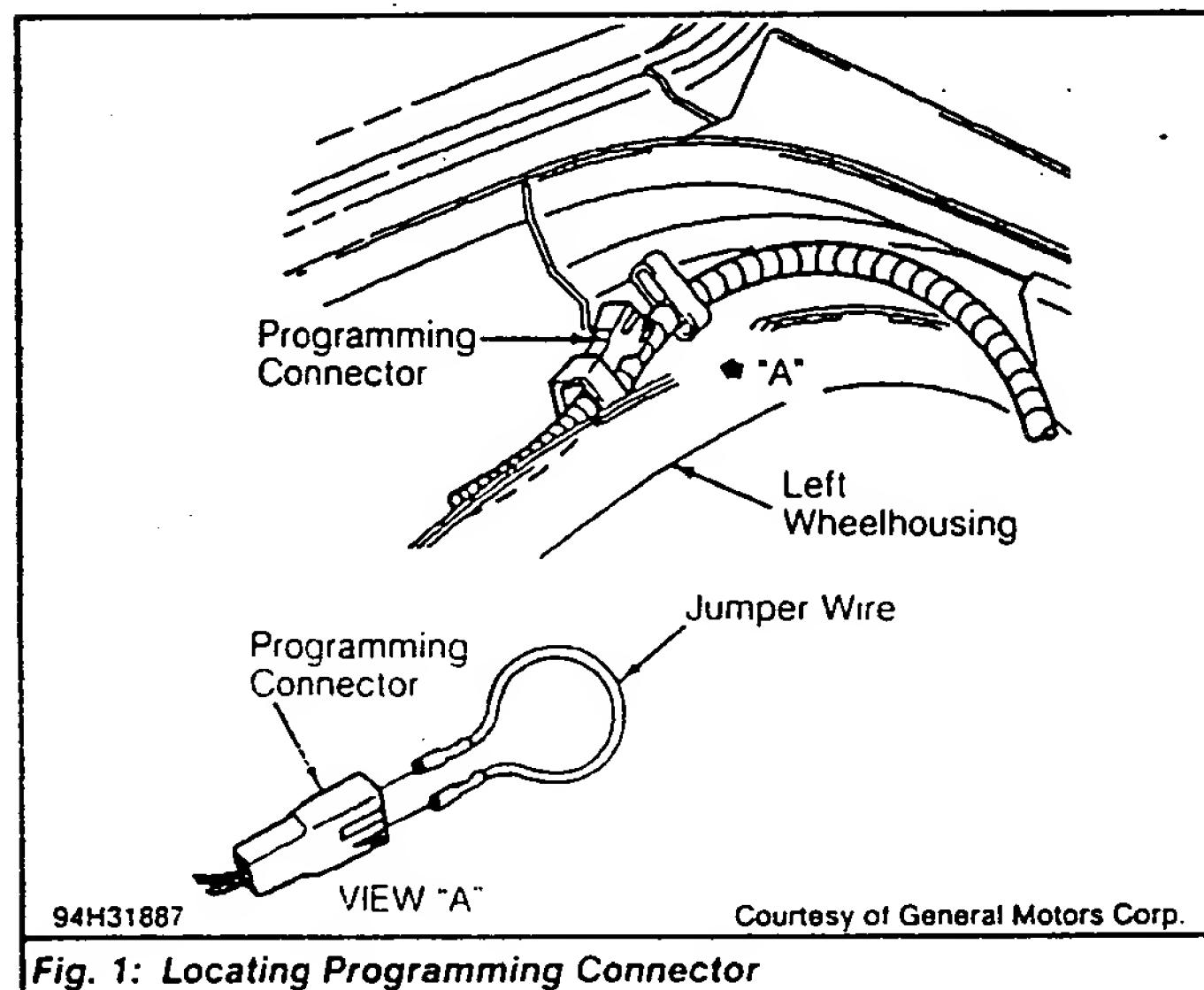


Fig. 1: Locating Programming Connector

3) Program connector contains 2 terminals. Tan wire in terminal "A" is programming lead, and Black wire in terminal "B" is a ground. Jumping terminal "A" to "B" will initiate program mode. Module will cycle door locks as an indication of program mode feedback.

4) Press one button on transmitter one time to store VAC code for that transmitter. Door locks will cycle as feedback.

5) If only one transmitter is being programmed, go to next step. If more than one transmitter is being programmed, press one button on second transmitter to store second transmitter's VAC. First transmitter's VAC is retained. Door locks will cycle as feedback. If a second VAC signal is not received before programming harness is removed, receiver will be programmed to first transmitter's VAC only. This procedure prevents unauthorized programming.

6) Remove jumper wire from program connector. Verify proper operation of keyless entry system.

**NOTE: Do not leave door lock key in vehicle while programming keyless entry module. This will prevent unintentional lock out if programming procedure is not correctly performed.**

### TROUBLE SHOOTING

**NOTE: If vehicle is left for 24 or more days without ignition put in RUN position, keyless entry will be disabled to decrease battery drain. Putting ignition switch in RUN will restore system.**

1) Ensure all grounds and terminal contacts are clean and tight. Check GAUGES fuse by observing instrument cluster gauges. Check CTSY fuse by operating power door locks. Check battery transmitter terminals.

2) Try a known good second transmitter. If it works, change batteries in first transmitter and try it again. If it still does not work, replace transmitter.

### DIAGNOSIS & TESTING

#### REMOTE KEYLESS ENTRY & ILLUMINATED ENTRY

**Illuminated Entry Lights Do Not Operate Properly** – Disconnect RKE module connector C2. Check for battery voltage at RKE module connector C2 terminal "F" (White wire). If battery voltage is not present, check for open circuit or short to ground in White wire.

**Trunk Lid Release Does Not Operate Properly From Transmitters** – 1) Disconnect RKE module connector C1. Turn ignition switch to RUN position. Check for battery voltage at module connector C1 terminal "B" (Pink wire). If battery voltage is present, go to next step. If battery voltage is not present, check for open circuit or short to ground in Pink wire.

2) Disconnect RKE module connector C2. Connect jumper wire between module connector C2 terminal "B" (Black wire) and voltage. If trunk lid release solenoid activates, go to next step. If trunk lid release solenoid does not activate, check Black wire for an open circuit.

3) Put transmission in Park or Neutral. With RKE module connector C2 still disconnected, ensure continuity is present between terminal "G" (White/Black wire) and ground. If continuity is not present, check White/Black wire for an open circuit or short to voltage. If all checks are to specification, replace RKE module.

**Both Transmitters Do Not Operate Some Or All Features** – 1) Disconnect RKE module connector C1. Ensure continuity is present between connector terminal "F" (Black/White wire) and program connector terminal "A" (Black/White wire). If continuity is to specification, go to next step. If continuity is not to specification, check Black/White wire for an open circuit.

2) Turn ignition switch to RUN position. Check for battery voltage at module connector C1 terminal "B" (Pink wire). If battery voltage is present, reconnect connector and go to next step. If battery voltage is not present, check for open circuit or short to ground in Pink wire.

3) Disconnect RKE module connector C2. If battery voltage is present at connector terminal "A" (Orange wire), go to next step. If battery voltage is not present, check Orange wire for an open circuit.

4) Ensure RKE module connector C2 is still disconnected. Connect jumper wire between module connector C2 terminal "B" (Black wire) and voltage. If trunk lid release solenoid activates, go to next step. If trunk lid release solenoid does not activate, check Black wire for an open circuit.

5) Ensure RKE module connector C2 is still disconnected. Connect jumper wire between module connector C2 terminal "C" (Tan wire). If driver's door unlocks, go to next step. If driver's door does not unlock, check Tan wire and Gray wire at door lock motor for an open circuit.

6) Ensure RKE module connector C2 is still disconnected. Hold either door lock switch in unlock position. If battery voltage is present at module connector C2 terminal "D" (White wire), go to next step. If battery voltage is not present, check White wire for an open circuit.

7) Ensure RKE module connector C2 is still disconnected. Hold either door lock switch in lock position. If battery voltage is present at module connector C2 terminal "E" (Light Blue wire), go to next step. If battery voltage is not present, check Light Blue wire for an open circuit.

8) Ensure RKE module connector C2 is still disconnected. If battery voltage is present at module connector C2 terminal "F" (White wire), go to next step. If battery voltage is not present, check White wire for an open circuit.

9) Put transmission in Park or Neutral. With RKE module connector C2 still disconnected, ensure continuity is present between terminal "G" (White/Black wire) and ground. If continuity is not present, check White/Black wire for an open circuit or short to voltage. If all checks are to specification, replace RKE module.

# 1994 ACCESSORIES & EQUIPMENT

## Remote Keyless Entry System – Corvette (Cont.)

### EXITING TROUBLE CODE DIAGNOSIS

Diagnostic mode will be exited whenever grounding of diagnostic bus input is removed. Receiver will return to transmitter in range/ignition mode after exiting diagnosis.

### TRANSMITTER PROGRAMMING

**NOTE:** Ensure radio is turned off when programming PKE system.

- 1) Turn ignition switch to RUN position. Push and release TRIP ODO button. Push TRIP ODO button again and hold for 5 seconds.
- 2) Within 5 seconds, push and hold Fuel INFO button for 10 seconds. PASSIVE KEYLESS ENTRY light should come on continuously.
- 3) Turn ignition switch to LOCK position and leave key in ignition. PASSIVE KEYLESS ENTRY light should begin flashing the number of the transmitter to be programmed (once for first transmitter, twice for second, etc.)
- 4) When transmitter is programmed and code stored, light will illuminate continuously as long as that transmitter remains within reception range.

### REMOVAL & INSTALLATION

**NOTE:** See PKE COMPONENT LOCATION table.

#### DOOR ANTENNA

**Removal & Installation** – Remove door outside protective molding. Remove door trim panel. Remove door accessory mounting plate. Drill out antenna mounting rivets. Disconnect harness connector and retaining clip. Remove antenna by pulling firmly on each adhesive pad. See Fig. 1. To install, reverse removal procedure.

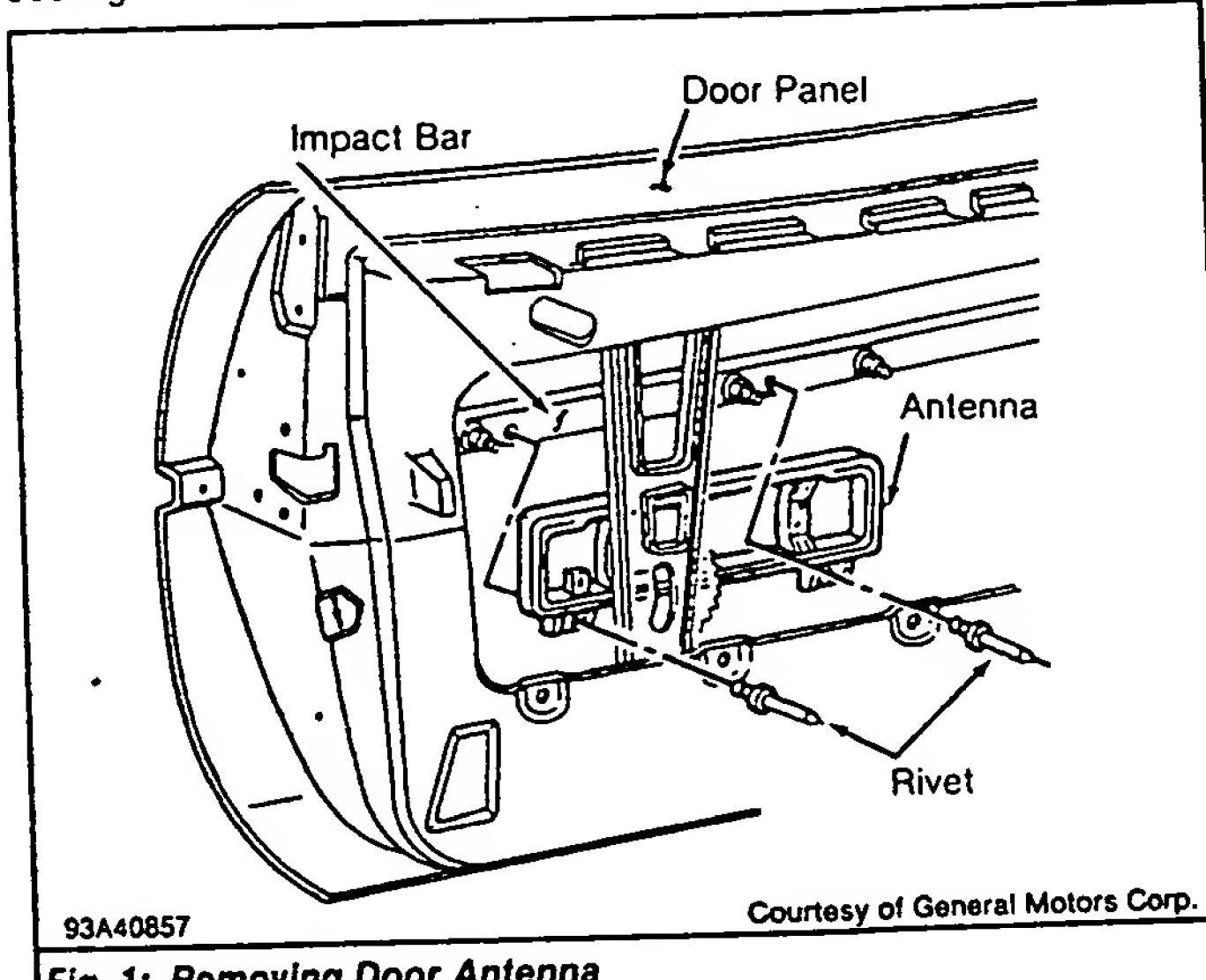


Fig. 1: Removing Door Antenna

#### REAR ANTENNA – COUPE

**Removal & Installation** – Open rear lift window hatch. Remove rear floor stowage compartment handle. Separate hook and loop fastener from stowage compartment doors and move carpeting out of way. To access antenna, fold down carpet insulator. Disconnect electrical connector. Drill out mounting rivets. Remove antenna by pulling firmly on each adhesive pad. See Fig. 2. To install, reverse removal procedure.

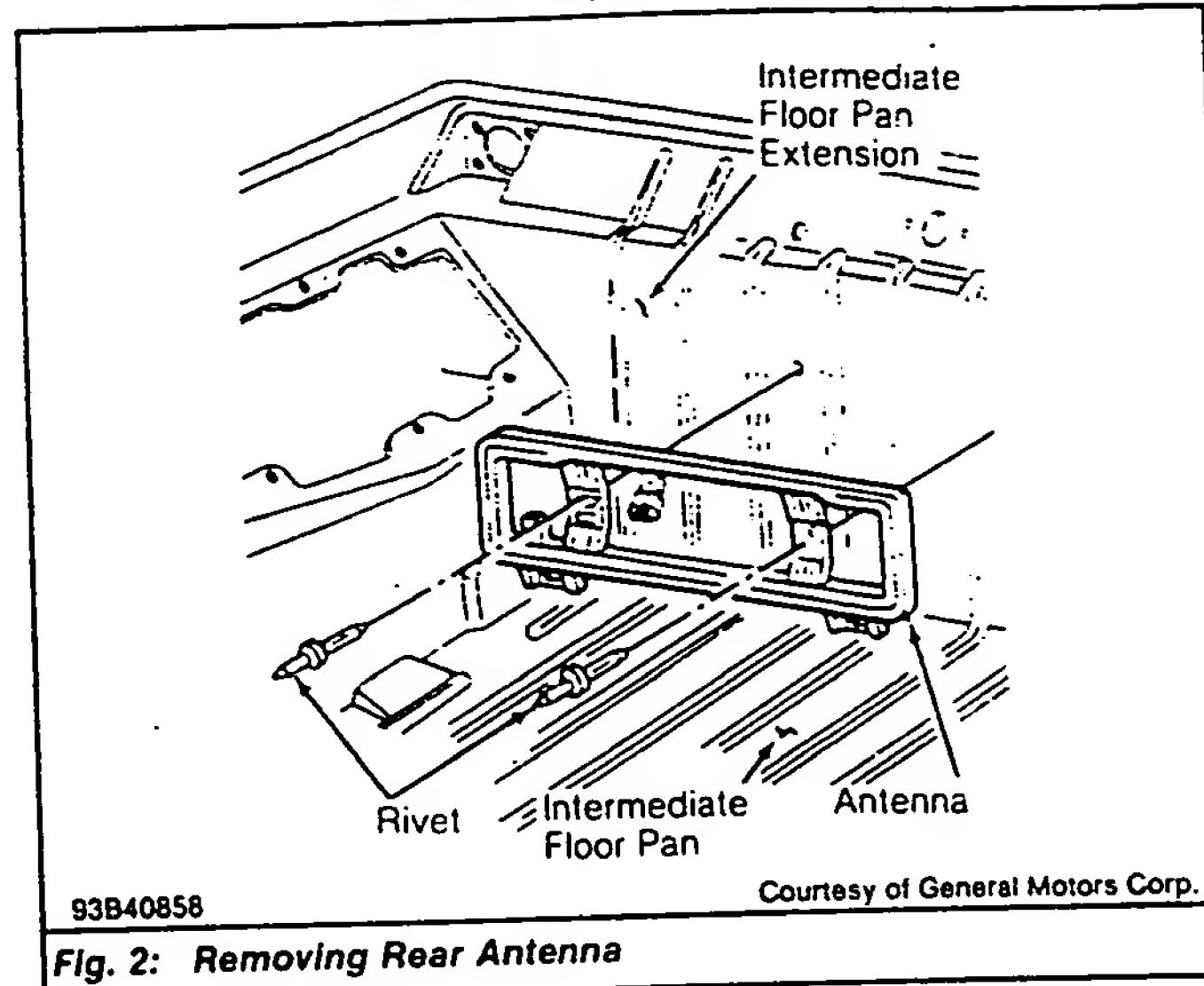


Fig. 2: Removing Rear Antenna

#### PKE RECEIVER

**Removal & Installation** – Remove instrument panel upper trim pad. Remove chime module from receiver by pulling firmly on module to separate hook and loop fastener. Remove receiver from retainer. See Fig. 3. Disconnect electrical connector. To install, reverse removal procedure.

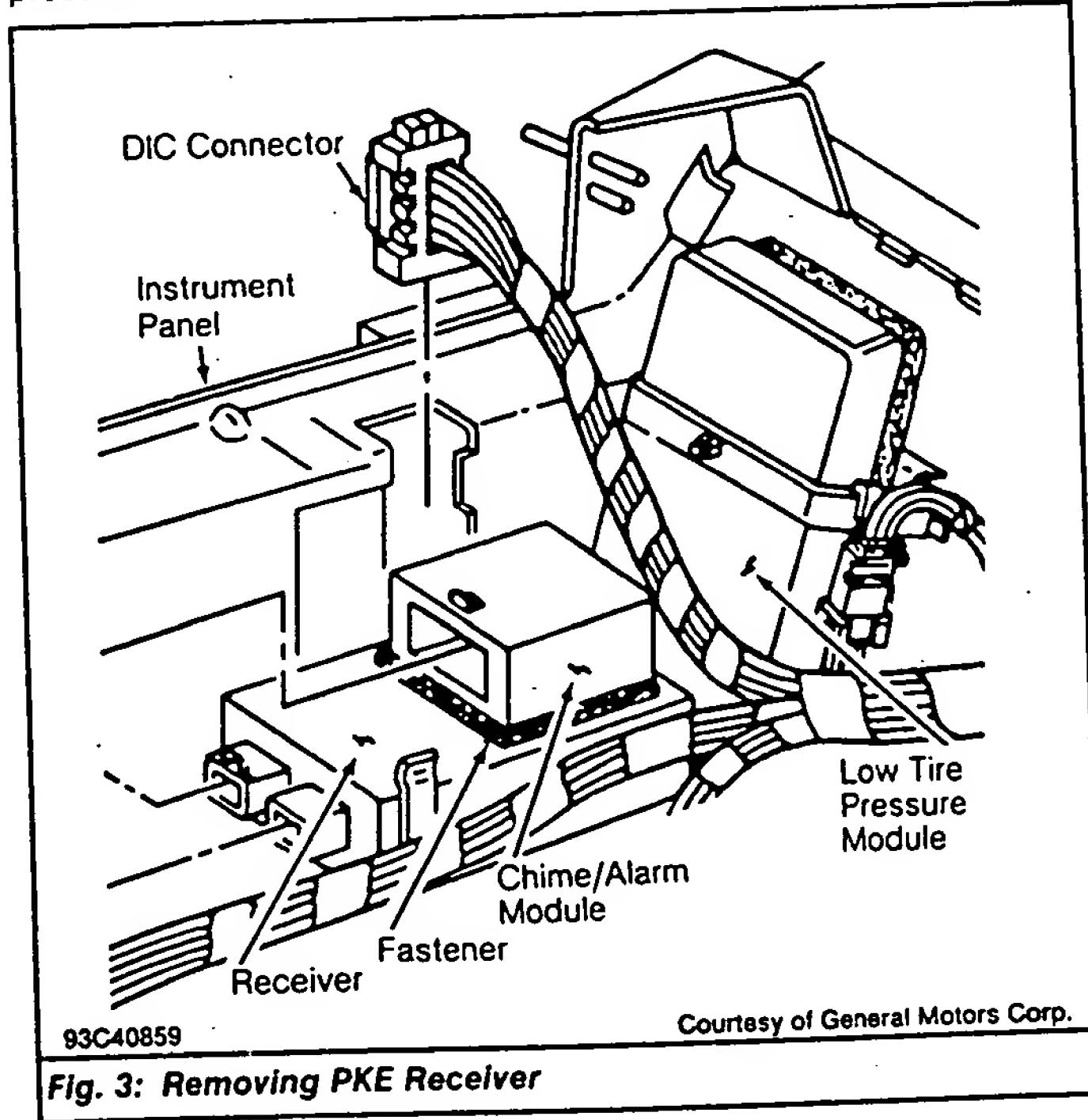


Fig. 3: Removing PKE Receiver

# 1994 ACCESSORIES & EQUIPMENT

## Remote Keyless Entry System - Mustang

### DESCRIPTION & OPERATION

The remote keyless entry system has 3 major components: an Electronic Door Lock Control Processor (EDLCP), also called a control module, located in the trunk behind the left trim panel; an antenna, located under the quarter trim panel; and a remote transmitter, carried by the driver.

When the operator presses the appropriate transmitter button, the system locks and unlocks doors and the trunk, activates or deactivates the security system, and turns on convenience lights. A battery saver feature shuts off power to convenience lights 45 minutes after the last input to the processor.

### TRANSMITTER PROGRAMMING

- 1) Turn ignition on. Remove left trim panel from trunk. Momentarily connect terminals of 2-pin program connector, located next to EDLCP, taped to harness. All doors should lock, then unlock. Break connection at program connector.
- 2) Press any button on transmitter. Doors should lock and unlock to verify that transmitter has been programmed. If doors do not lock, try again up to 3 times. If door locks fail to respond, go to DOOR LOCK SOLENOID TEST under TESTING.
- 3) Repeat step 2) to program additional transmitters. Up to 4 transmitters may be programmed. Turn ignition off. Check system operation.

### TRANSMITTER BATTERIES

Open transmitter by inserting coin between halves and twisting. Carefully swing contacts from old batteries. Insert new batteries with positive terminal downward. Carefully swing contacts into position. Snap transmitter halves together.

### TROUBLE SHOOTING

Before performing individual component tests, check the following for possible cause of system malfunction.

- Binding Linkage
- Binding Locks or Latches
- Misaligned Door
- Misaligned Trunk Lid
- Faulty Fuse(s)
- Loose or Corroded Connectors
- Damaged Wiring
- Damaged Transmitter
- Faulty Transmitter Batteries

### TESTING

#### DOOR LOCK SOLENOID TEST

**CAUTION:** When performing the following test, do not apply power to solenoid longer than 5 seconds.

- 1) Apply 12 volts to actuator terminals. Actuator solenoid should operate. Actuator rod should complete its travel in less than one second. Transpose leads to actuator solenoid. Solenoid should operate in reverse direction at same speed.
- 2) Measure actuator solenoid current. Transpose jumper leads to measure reverse current. Replace solenoid if current exceeds 6 amps, or if operation is not as specified.

### REMOVAL & INSTALLATION

**CAUTION:** When battery is disconnected, vehicle computer and memory systems may lose memory data. Driveability problems may exist until computer systems have completed a relearn cycle. See COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION before disconnecting battery.

### ANTENNA

**NOTE:** Antenna is part of main harness. DO NOT remove damaged antenna from harness.

Removal & Installation - 1) Unplug antenna connector from EDLCP. Tape securely out of way. On convertible, remove plastic tube portion of antenna, located behind rear seats. Tape securely out of way. 2) On all models, connect new antenna lead to EDLCP. Install new antenna along path followed by damaged antenna, using tape or wire wraps approved for the purpose.

### CONTROL MODULE (EDLCP)

Removal & Installation - 1) Disconnect negative battery cable. Open trunk. Remove left trim panel. Disengage relay panel retaining tabs. Lower relay panel. 2) Remove EDLCP. Unplug harness connectors. Unplug antenna connector. To install, reverse removal procedure.

### DOOR LOCK SOLENOID

Removal & Installation - Remove door trim panel and watershield. Loosen latch mechanism, if necessary, to provide access to solenoid. Drill out rivets to remove solenoid. To install, reverse removal procedure. Secure solenoid with new rivets.



# NISSAN

**SENTRA  
STANZA ALTIMA  
300ZX  
MAXIMA  
QUEST  
TRUCK &  
PATHFINDER**

1994 Models Introduction

Vol. 246

N2179

## REPLACING REMOTE CONTROLLER OR CONTROL UNIT

If the remote controller or the control unit needs to be replaced or if an additional remote controller needs to be set, enter the Identity (ID) code manually.

### ID Code Entry Procedure

To enter the ID code, follow this procedure.

"Setting mode".

Three steps must be followed to establish the "setting mode".

(1) Open the trunk.

(2) Close and lock all doors.

(3) Insert and remove the key from the ignition more than six times within 10 seconds.

ID code entry:

(4) Unlock and lock the driver's door inside lock lever once.

(5) Push lock button on the new remote controller once (for example, if door is locked using the remote controller during this ID code entry enable state, a new ID code can be entered).

Note

At this time, the original ID codes are eliminated and the new ID code is entered.

(6) If you need to enter additional remote controllers (including the original) repeat the step (4) and (5) for each additional controller.

(7) This ID code entry enable state and setting mode remain until any one of the doors is opened.

Note

- If the same ID code that existing in the memory is input, the entry is canceled, and no ID code will be entered.
- Entry of maximum four ID codes is allowed and any attempt to enter more will be ignored.
- Any ID codes entered after termination of the "setting" mode will not be accepted. Additionally remote control signals will be inhibited when an ID code has not been entered during the "setting" mode.

TOYOTA

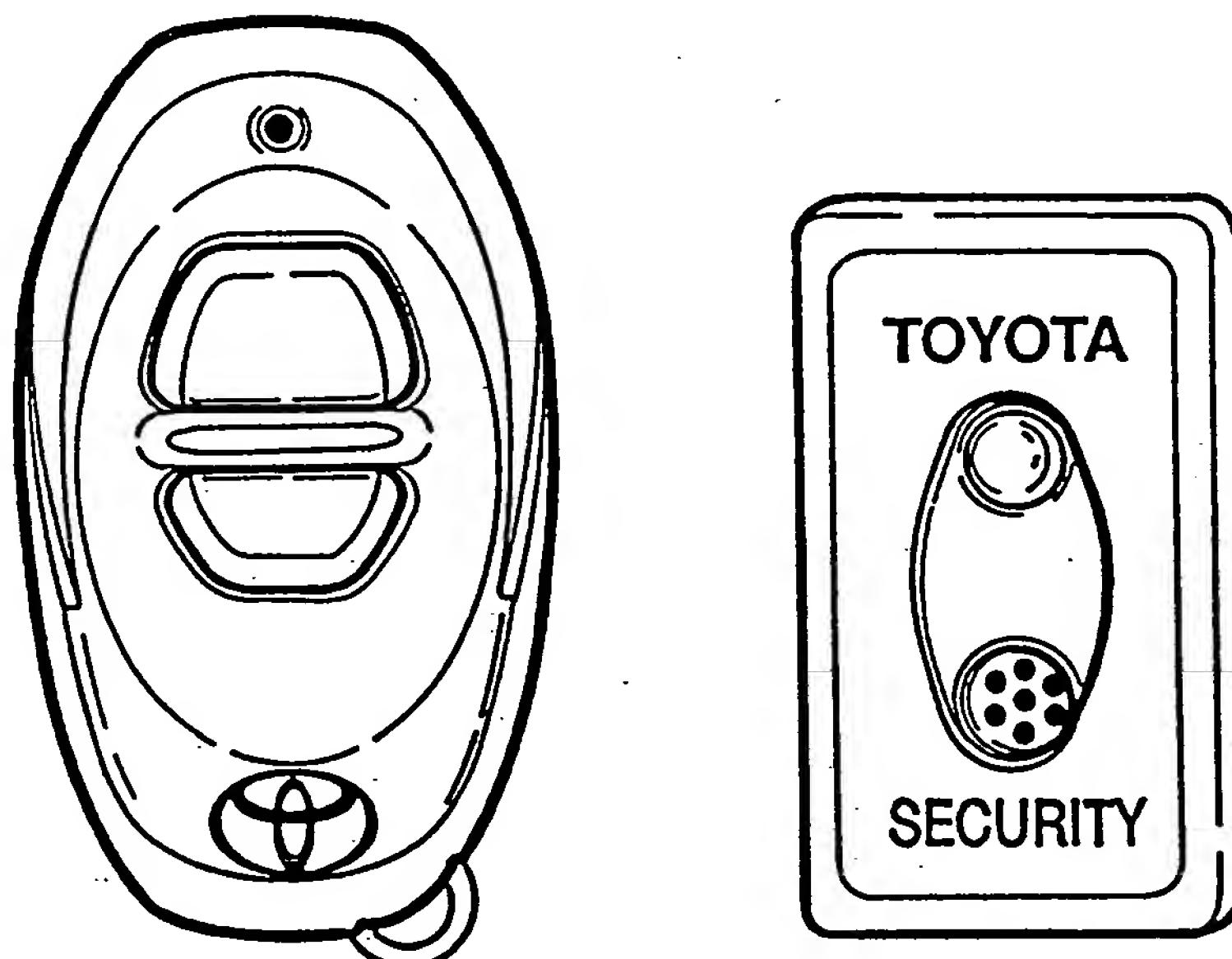
**VIP**



VEHICLE INTRUSION PROTECTION

**RS3000**

REMOTE CONTROLLED SECURITY SYSTEM  
DESIGNED SPECIFICALLY FOR YOUR TOYOTA VEHICLE



**OWNER'S GUIDE**

## PROGRAMMING AND ADJUSTMENTS

### REMOTE CONTROL PROGRAMMING

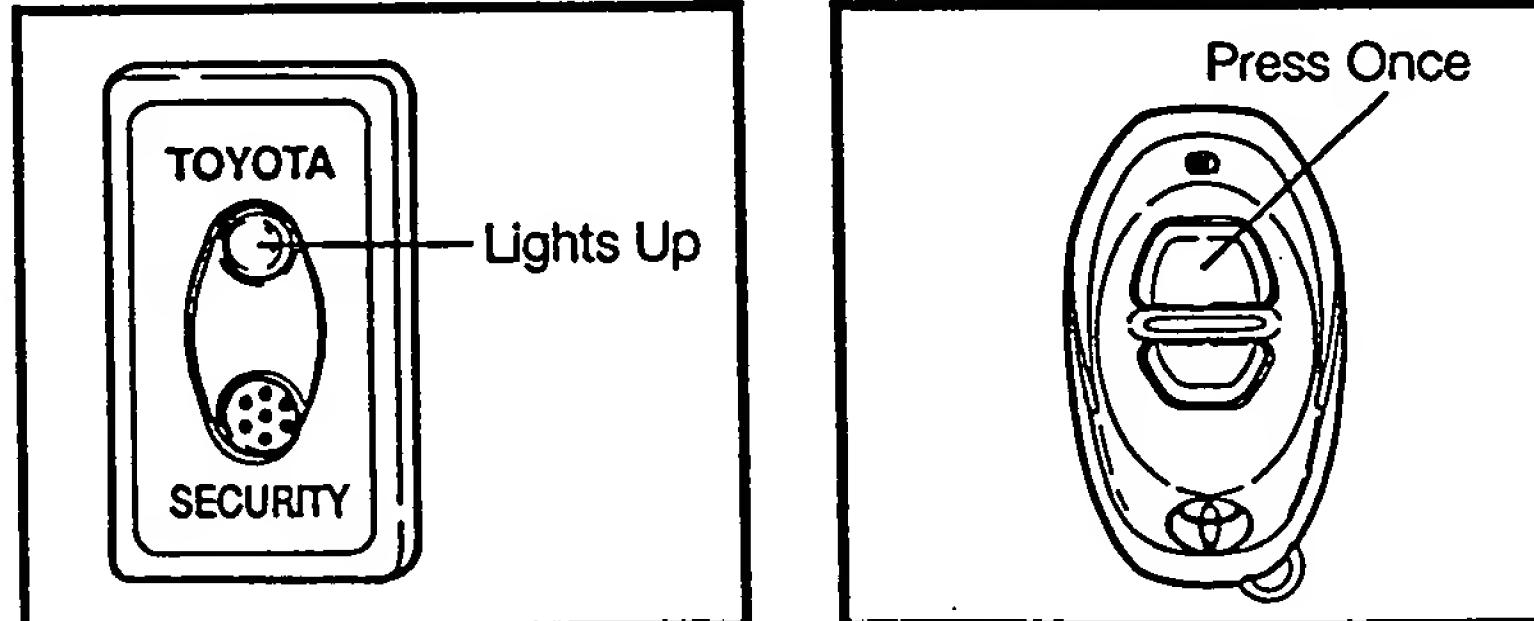
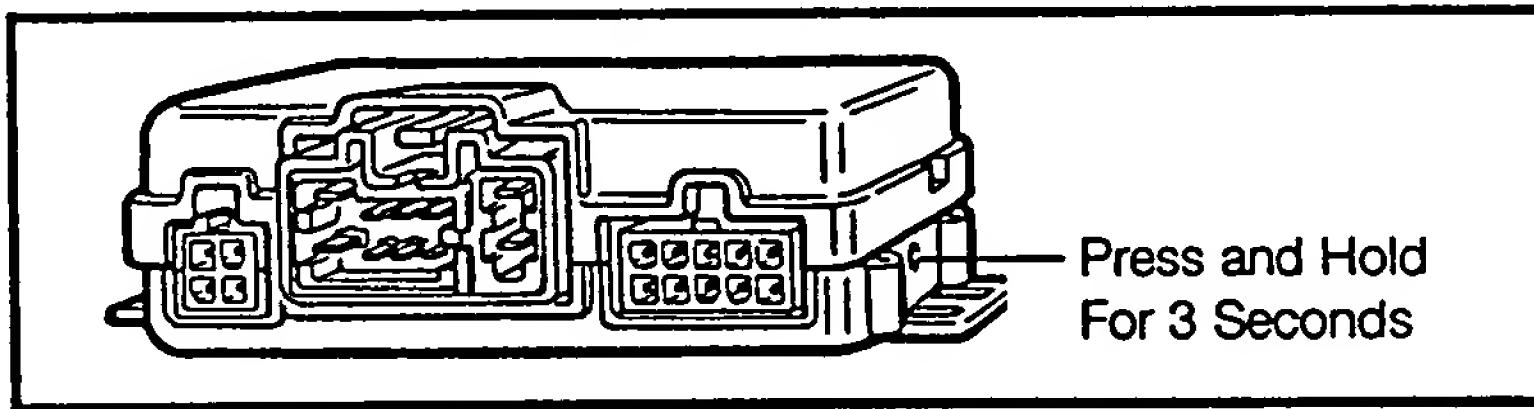
The RS3000 ECU can be programmed to be operated by as many as 4 REMOTE CONTROLS. Additionally, a REMOTE CONTROL's top and bottom buttons may be assigned to operate different vehicles' RS3000 or Keyless Entry Systems, and both buttons can be programmed to operate the system in one vehicle. To add or delete a REMOTE CONTROL, you must access the RS3000 ECU (computer); ECU location varies by vehicle, and vehicle model.

**NOTE:** Please contact your Toyota dealer for an appointment to add or delete REMOTE CONTROLS to your system. Additional REMOTE CONTROLS may be purchased in your Toyota dealer's parts department.

**To program (add) a REMOTE CONTROL to the system:**

- 1) Insert key into the ignition switch, and turn it to "ON".
- 2) Press and hold the ECU's PROGRAMMING SWITCH for 3 seconds.  
The STATUS MONITOR LED turns on for 5 seconds.  
**-YOU MUST PERFORM THE NEXT STEP WITHIN 5 SECONDS-**
- 3) Press and release a REMOTE CONTROL's top or bottom button.\*  
The STATUS MONITOR LED turns off.  
The PIEZO "CHIRPER" chirps once.  
The exterior lights flash once.
- 4) Turn off the ignition. The ECU will now operate with the REMOTE CONTROL just programmed.

**NOTE:** The factory preset operation is for the top button on both REMOTE CONTROLS to operate your system; the bottom button is not programmed to operate your system. To prevent accidental erasure of a REMOTE CONTROL code, we recommend that all REMOTE CONTROLS be programmed at the same time.



\* Either button on your REMOTE CONTROL can be programmed to operate the RS3000.

## PROGRAMMING AND ADJUSTMENTS

### REMOTE CONTROL PROGRAMMING

To erase all REMOTE CONTROL codes from the system:

- 1) Insert key into the ignition switch, and turn it to "ON".
- 2) Press and hold the ECU's PROGRAMMING SWITCH for 3 seconds.  
The STATUS MONITOR LED turns on for 5 seconds.

—YOU MUST PERFORM THE NEXT STEP WITHIN 5 SECONDS—

- 3) Press and hold the ECU's PROGRAMMING SWITCH for over 2 seconds again.  
The STATUS MONITOR LED turns off, then flashes 3 times  
The PIEZO "CHIRPER" chirps 3 times, and the exterior lights flash 3 times.
- 4) Turn off the ignition. The ECU has cleared all REMOTE CONTROL codes; until another REMOTE CONTROL is programmed, the system will not work with any REMOTE CONTROL.

